THE MEDIEVAL CERAMICS FROM ROME: FROM SHERDS TO ECONOMIC HISTORY

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Abstract

This thesis analyses the medieval ceramics circulating in Rome between the tenth and the fourteenth centuries, using quantitative methods for fitting ceramic data into the wider economic history of Rome. Even though the importance of Rome during Middle Ages is undeniable, it is still difficult to fit the numerous archaeological data into an overall analysis of the city. In particular, with ceramics as the most numerous find, it is crucial to fully understand what kinds of information these might return: the ceramic assemblages found in three sample-sites (*Vicus ad Carinas*, Colosseum, and church of S. Omobono) have been fully studied and compared, in order to reach a diachronic level of analysis. In fact, each site has a different chronology, thus this diachronic approach clearly shows differences and similarities of each period. Finally, the results of such analysis have been put together again and reanalysed regarding the economy of medieval Rome. The final aim is to demonstrate the importance of ceramics as a source, as these increase our knowledge of medieval trades, production, and diet.

The thesis is divided into different sections: the first part is an overview of sources for medieval Rome, its people and economy, and medieval ceramics of Rome; in the second part each site has been analysed, from its earliest phases to the medieval ones, assessing both archaeological evidence and written sources; the third part focuses on quantification methods, particularly those used for analysing the three assemblages; finally, the conclusions fit the results of these quantifications into the broader context of medieval Rome.

For my grandparents

Acknowledgements

There are many people to whom I owe my gratitude in helping me to complete this thesis.

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La storia degli uomini è in definitiva la storia di quegli oggetti e delle parole che li indicano,
e dei nessi esistenti fra gli uni e le altre,
più i loro usi e disusi, il come, il fine per cui, il dove e il chi li ha prodotti.
J. Saramago, *Viaggio in Portogallo*

Chapter 1
Medieval Rome

1.1 – Introduction

Ceramics are *the* definitive archaeological find, occurring as the most common artefact type found during excavations, being the last remnant able to "speak" about what happened before. Ceramics are therefore the core archaeological object, raising interest among generations of scholars. Unsurprisingly, ceramics are the most commonly documented, frequently analysing shape, chronology and consumption, since through them it is possible to infer multiple aspects, such as timeline, trades, and wider economic landscape of a site throughout historic periods. Furthermore, being able to identify the vessels is crucial in order to determine the societies making them, who they traded with and how far their influence was felt. Most commonly discussed examples concern conservation and serving of food, local trade and degree of technological sophistication accessible to a society.[1] More recently, chemical

[1] In particular, see F. Giovannini, 'Funzioni delle forme ceramiche e modelli alimentari medievali', and M. Ricci, 'Appunti per una storia della produzone e del consumo della ceramica da cucina a Roma nel medioevo', both in E. De Minicis (ed.), *Le ceramiche di Roma e del Lazio in età medievale e moderna. III. Atti del III Convegno di studi (Roma, 19-20 aprile 1996*), (Rome, 1998), pp.15-22 and pp. 34-42. As a comparator, see J. Vroom, *After Antiquity. Ceramics and society in the Aegean from the 7th to the 20th century A.D.: a case study from Boeotia, Central Greece*, (Leiden, 2003).

analysis of clays, if permitted by site conditions, have added significant data regarding the production origin of seemingly ubiquitous ceramic sherds.[2]

Therefore, ceramics offer several starting points for wider research, from the analysis of a single archaeological site to wider studies related to the people who created and used such objects. Deciding on which aspects should be focused on depends on the questions asked of the ceramics themselves. In the case of this thesis the focus is on ceramics circulating in Rome between the tenth and fourteenth century AD.

Since ceramics are potentially full of information, regarding wider economic issues and more specific aspects related to daily life and consumption,[3] this information should be utilised to its full potential and integrated with historical sources in order to contribute to a more complete understanding of specific sites and areas during certain periods.

The focus of this thesis is medieval Rome, meaning that it is crucial to understand the city itself during this period. During the Middle Ages (6th-15th century) Rome went through several economic transformations, documented by many analyses; however, available archaeological research in this field is limited. [4] Despite Rome being one of the best-excavated cities in Italy for the medieval period, data from many excavations are undeniably underutilised. As discussed in the next chapter,

[2] M. B. Annis, 'Ricerche mineralogiche petrografiche e analisi fisico-chimica di campioni ceramici provenienti da diversi contesti romani', in E. De Minicis (ed.), *La ceramica invetriata tardo-antica e altomedievale in Italia*, (Florence, 1992), pp. 603-620, and M. B. Annis, 'Ceramica altomedievale a vetrina pesante e ceramica medievale a vetrina sparsa proveniente dallo scavo di S. Sisto Vecchio in Roma: analisi tecnologica e proposta interpretativa', in L. Paroli (ed.), *La ceramica invetriata tardo-antica e altomedievale in Italia*, (Florence, 1992), pp. 394-417.

[3] See note 1, and A. Molinari, 'La ceramica medievale in Italia ed il suo possibile utilizzo per lo studio della storia economica', in *Archeologia Medievale*, 30, 2003, pp. 519-528.

[4] Here we mention: C. Carbonetti Venditelli, S. Carocci, A. Molinari, *Roma*, (Spoleto, 2017); J.C. Maire Vigueur, *L'altra Roma. Una storia dei romani all'epoca dei comuni (secoli XII-XIV)*, (Turin, 2011); and C. Wickham, *Medieval Rome: stability and crisis of a city, 900-1050*, (Oxford, 2014).

often the data from the various excavations across the city have not been compared, resulting in a patchy historical perspective of Rome. Often such data are only used to date a particular context or fill, with few classes or vessel forms used to analyse wider questions. Further, the evidence presented is often difficult to comprehend by non-specialists. It is clear that this kind of approach has far-reaching impacts on the knowledge of medieval Rome, as the ceramic data are often not fully serviceable for wider analysis.[5] This thesis will show the varied nature of information obtainable from ceramics, and cover several aspects – from daily life to cultural identity. By considering a quantity of excavated ceramics in the complex city of medieval Rome, it is hoped that the findings will provide a greater understanding, enabling us to fully utilise thousands of sherds in context. This material culture must be considered as a source that can be integrated with historical sources to expand available knowledge of medieval Rome. Finally, wider analyses of ceramics may permit the study of the formation of archaeological deposits, which are of great importance at complex sites, such as the ones to be analysed here.

For this thesis, three largely unpublished sites (Fig. 1) will be used as case studies and compared to the main medieval assemblages previously excavated both in Rome and in its immediate surroundings.[6] The analysis of the ceramics from those sites will then be integrated with historical evidence, to generate new statements on Rome's medieval economics and populations.

[5] As will be explained in detail later, the only exception (even if limited) is M. Ceci M. (ed.), *I contesti ceramici dei Fori Imperiali*, (Oxford, 2013).

[6] The assemblage from *Vicus ad Carinas* is the only one wholly unpublished; the data from the ceramics found in Colosseum have been recently published in G. Facchin, R. Rea, R. Santangeli Valenzani (eds.), *Anfiteatro Flavio. Trasformazioni e riusi*, (Milan, 2018); as regards S. Omobono, for the ceramics see M. Giustini, 'Appendice – Ceramica Medievale, Laterizi, Reperti Metallici, Oggetti in Osso e Monete' in *RedPontAcc., 77*, (Vatican City, 2005), pp. 79-131.

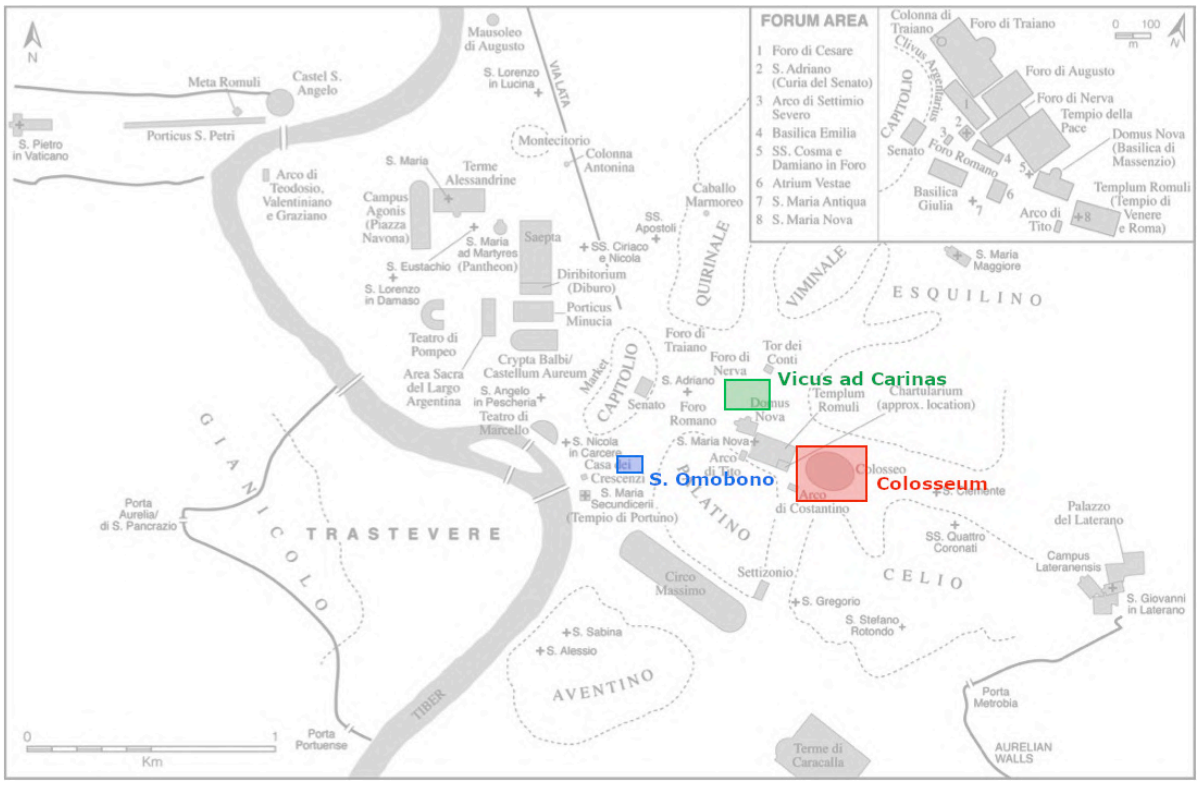

Figure 1: Location of the sites in Rome studied for this thesis. (Source: original map in Wickham 2015, Map 8, p. XXVII; modified by L. Campagna)

Chapters 1 and 2 of this thesis will describe current understandings of medieval Rome, its society, and its ceramics, including the most important assemblages studied since the 1980s, beginning with a brief explanation of the main classes. Chapter 3 will outline the methodology used for this research, assessing different methods available for quantifying ceramics. The central part of this thesis comprises three chapters which analyse the assemblages from three sites: the *Vicus ad Carinas*, dated from the tenth to eleventh century (Chapter 4); *Cuneo IX* and *Cuneo X* of the Colosseum, dated to the late twelfth century and the first half of the thirteenth century (Chapter 5); and the archaeological deposit inside the church of S. Omobono, dated to the fourteenth century (Chapter 6). Each site will be fully explained and then compared to similar sites within the city itself. Chapter 7 will quantify and analyse each assemblage from the three sample sites, both individually and in comparison. Finally, within Conclusion, the data generated will be articulated within the wider context of medieval Rome, to highlight the potential of such comparative

analysis, integrating archaeological and historical sources for the tenth to fourteenth century.

The analysis of types and the quantification of the ceramics from the three sites are thus the cornerstone of this thesis. All the sherds have been personally counted and studied across the last three years (Chapter 3). In this thesis, I will summarise this large amount of data into overall and summary charts (Appendices). In addition, explanatory illustrations and graphs will be displayed in the main text.

1.2 - The Historiography and the Written Sources on Medieval Rome

Before investigating the current level of understanding of medieval ceramic products in medieval Rome (see Chapter 2), our knowledge of the city at this time should be established. In doing so, I will analyse the society, economy and topography of Rome between the tenth and the fourteenth century, to set a broader narrative.

We begin with brief analysis of the historiography of medieval Rome and its written sources. In recent decades there has been renewed interest in Rome's medieval phases. Previously, the medieval city was simply considered different from the other Italian cities, and generally characterised by decline. Clearly, such assumptions are too vague to describe the city that remained the largest in Latin Europe until the twelfth century and inherited greatly complex political and topographical complexity from the Roman Empire. This perspective largely arose from past historiography, whose focus centred on the papal role, and thus on the diversity of Rome as a symbol of moral superiority, prejudging everything different from the ideal image of the papal city.[7] Indeed, as recently summarised by Chris Wickham,

[7] See Wickham, *Medieval Rome*, pp.13-20.

despite general interest since the end of the nineteenth century, when Rome's documents were progressively published by the journal of the *Archivio della Società Romana di Storia Patria* (ASRSP), [8] most historians focused on the papal history.[9] In addition, some out-dated prejudices about the citizens of Rome affected the historiography, since there was a division between the "right" history of the city, the papal one, and the "wrong" one, which was related to its citizens and its territory, focussing more on the actual city. Obviously, such moral prejudice has partly contributed to this misunderstanding of medieval Rome, as it appeared to be no more than an almost abandoned and ruined city characterised by corruption and provincialism, with the popes as protectors of moral integrity. At the same time, the limits of the research about the origins of the Roman Senate can result in over-estimation, often presented with too great emphasis. In addition, it must be considered that, at the end of the nineteenth century, the medieval archaeological evidence was still scarce, contributing to the image of a declining city and reinforcing the importance related to the presence of the popes.

Fortunately, the 1980s were the starting point of a new interest on medieval Rome, which has since begun to be analysed from varying perspectives, including archaeology (notably, the *Crypta Balbi* excavations). Richard Krautheimer's work, *Rome. Profile of a City, 312-1308*, is still significant, as it most likely can be considered a cornerstone of studies about post-classical Rome.[10] In particular, it was the first instance the city was analysed topographically, attempting to outline its actual appearance and analysing the observable medieval evidence in the modern city. Krautheimer's work started a new tradition, focusing on the city structure, which has been built upon with data from archaeological excavations. At the same time,

[8] However, we must consider that most documents for 1200-1400 remain unedited.

[9] See Wickham, *Medieval Rome*, pp. 13-15; A. Hamilton, *History of the City of Rome in the Middle Ages / by Ferdinand Gregorovius - translated from the 4th German edition*, (London 1894-1902), and P. Brezzi, *Roma e l'impero medioevale (774-1252)*, (Bologna, 1947).

[10] See R. Krautheimer, *Rome: Profile of a City, 312-1308*, (Princeton, 1980).

Rome started to be studied from an "external" perspective. In 1973 *Les structures du Latium medieval*, by Pierre Toubert was published. The importance of this work is related to the "new" awareness of the surroundings of the city, which depended on the city itself, and vice versa. This connection between Rome and its hinterland is one of the features that contributes to making Rome unique in its medieval development, an example of which is raised in the introduction, when briefly analysing the ceramics found in S. Cornelia (Chapter 2). Such innovative works were crucial for the development of a new rich tradition of study, enabling modern analyses of the city to take multiple perspectives, such as political structure and society. For example, the numerous works by Sandro Carocci and Marco Venditelli must be.[11] In addition, as will be analysed in Chapter 4, regarding the Imperial Fora, recent excavations have altered the pessimistic archaeological view, through the discovery of evidence suggesting medieval dwellings found both in the Forum of Caesar and in the Forum of Nerva. Such dwellings are crucial, as they have created a new focus on Rome, which has been recently enriched by the overall works of Jean-Claude Maire Vigueur and Chris Wickham. At the moment, those two works are the widest works about Rome, since before them fewer were published between the 1970s and 1980s.[12] Yet these latter works do point out the necessity of comparing and integrating archaeological and historical data, since the written sources insufficiently describe the development of a complex city such as Rome.

It is undeniable that there are relatively abundant written sources for papal activity and that of the Church more generally, because of the importance of the Roman ecclesiastical strata. However, such over-mentioned scarcity of the written sources for Rome must be put into perspective, as for the same period it is generally true for most Italian cities. Conversely, as recently demonstrated, Rome has numerous

[11] S. Carocci, *Baroni di Roma*, (Rome, 1993); S. Carocci, M. Vendittelli, 'Società ed economia (1050-1420)', in A. Vauchez (ed.), *Roma medievale*, (Rome and Bari, 2001), pp. 71-116; M. Vendittelli, 'Élite citadine', in *Les élites urbaines au moyen age*, (Rome, 1997), pp. 183-191.
[12] Notable is L. Moscati, *Alle origini del commune romano*, (Rome, 1980).

medieval written sources, and only the seventh, eighth and ninth centuries are of restricted insight.[13] For example, as Wickham shows, the sources regarding Rome are typologically different, permitting the analysis of different aspects of the social and economic life of the city and its surroundings. Vendittelli points more to the quantity of these sources, which are limited in variety compared to other Italian cities; however, this is contradicted when considering the numerous types of sources mentioned and used by Wickham.[14] Available narrative sources include documents, religious, polemic and several liturgical encyclopaedias, such as the *Liber Censuum*, dated to 1192.[15] This variety of sources equips us with an array of information not limited to properties and main events of Rome, or those considered important at that time. It also provides an informed perspective of the mindset of that period and appearance of the city, such as the processions described in *Liber Censuum*. Furthermore, as the recent work by Caroline Goodson, *The Rome of Pope Paschal I*, demonstrates, it is possible to obtain different information types from the same sources, citing workers mentioned in the long lists of papal donations to infer the richness of Rome in the ninth century.[16]

Regarding their quantity, up to AD 1200 there are over one thousand documents, originating from the archives of almost thirty churches. Most have been published, providing a patchy image of the city unrelated to the number of sources available. Despite this, much knowledge is lost, as originally there were more than three hundred churches in the area of medieval Rome. Moreover, this is also true of the population, as of those living in Rome during this period making transactions, only a tiny proportion required documentation. As such, recorded transactions should be

[13] For Roman written sources see Wickham, *Medieval Rome*, note 4, pp. 5-12; Lori Sanfilippo, *La Roma dei Romani. Arti mestieri e professioni nella Roma del Trecento*, (Rome, 2001), pp. 3-14.
[14] See Wickham, *Medieval Rome*.
[15] Ibid., pp. 344-359.
[16] See C. J. Goodson, *The Rome of Pope Paschal I,* (Cambridge, 2010), and Thomas F.X. Noble, 'Paradoxes and possibilities in the sources for Roman society in the Early Middle Ages', in J. M. Smith (ed.), *Early medieval Rome and the Christian West: Essays in Honour of Donald A. Bullough*, (Leiden, 2000), pp. 55-84.

considered to relate mainly to important transactions. Thus, some areas and aspects of Rome are scarcely documented or not documented at all, providing a scattered image of medieval Rome.

1.3 - Population, Settlement and Society

The rich historiography of Rome, despite being scattered, is crucial as it allows the analysis of the development of Rome between the tenth and the fourteenth century. In particular, if considering the principal works published recently, Wickham's work focuses on the period between 900 and 1150, while Maire Vigueur analyses the centuries between 1150 and 1400. Even if some archaeological data are included in such overall works, particularly by Wickham, there is no archaeological synthesis, discussing Rome as a whole, with even the work regarding Imperial Fora being partial. Furthermore, if we consider that the archaeological data are potentially no less valuable than the historical sources, this lack is even more serious. The recent (2015) volume**,** *L'archeologia della produzione a Roma (secoli V-XV) – Atti del convegno internazionale di studi*, in part fills this gap, reporting finds from several sites across the city. This successfully creates an overall assessment of medieval Roman productions, but highlights it as one of the many aspects of medieval Rome requiring further research.

1.3.1 - Population

This topic is still a matter of debate and several scholars have attempted to provide estimations. In general, the population of medieval Rome has been under-estimated for a long time, likely as a result of the negative prejudice of the city mentioned above. At the same time, it is undeniable that the population had decreased since the first centuries AD, but the lack of censuses or tax lists before the sixteenth century makes it difficult to estimate numbers of people living within the city before that time. In fact, as analysed in more detail in the next section, the area included inside

the Aurelianic walls around 1,400 hectares (1,500 including the *Civitas Leonina*, the fortified quarter built around St. Peter's during the ninth century), complicating estimations due to the complexity of allocating the population inside such a large space. Nevertheless, it is accepted that the population of Rome under the Empire, which could have reached 600-700,000 or even 1,000,000 inhabitants, had already started to decrease from the late second century onwards and most likely a significant drop should be dated to the period of the sixth-century Gothic Wars, when the population dropped to lower than 100,000 inhabitants.[17] Indeed, for the eighth to tenth century estimates vary from just 5,000 inhabitants, as hypothesised by Hodges, to Krautheimer's 35,000, with Wickham, most recently, proposing 25,000 inhabitants.[18] Hodges makes this estimate based on the hypothetical average number of people living in each Roman monastery, while Wickham also analyses recent topographical and archaeological data, making this estimate more credible, as it takes into account more reliable data, such as locations of archaeological evidence (Fig. 2). Such estimates have been confirmed by Santangeli Valenzani, who proposes around 20,000 to 30,000 inhabitants during the Carolingian period, based on both written sources, such as *Liber Pontificalis*, and archaeological findings. Moreover, it is highly improbable that one of the biggest cities of Antiquity was reduced to being almost entirely empty, as there were no such deep crises for justifying the dramatic decrease hypothesised by Hodges.

The tenth and the eleventh centuries marked a progressive increase in the

[17] E. Lo Cascio, 'Il popolamento', in S. Ensoli, E. La Rocca (eds.), *Aurea Roma. Dalla città pagana alla città cristiana*, (Rome, 2000), pp. 52-54.

[18] For Rome's medieval population, see: R. Krautheimer, *Rome: profile of a city*, note 10; C. Wickham, 'The Romans according to their malign custom: Rome in Italy in the late ninth and tenth century', in Smith, *Early Medieval Rome and the Christian West*, pp. 151-167, and R. Hodges, 'The riddle of St. Peter's Republic', in in P. Delogu, L. Paroli (eds.), *La Storia economica di Roma nell'alto Medioevo alla luce dei recenti scavi archeologici. Atti del Seminario - Roma 1992*, (Florence, 1993), p.353. For an archaeological point of view see R. Santangeli Valenzani, 'Strutture demografiche, economiche e sociali', in R. Meneghini, R. Santangeli Valenzani, *Roma nell'Altomedioevo. Topografia e urbanistica della città dal V al X secolo*, (Rome, 2004), pp. 21-28.

population, which started to be more concentrated in the area of *Campo Marzio*, *Trastevere* and *Civitas Leonina*. This was certainly related to the general dynamism that characterised Rome in that period, and this was confirmed by the foundation of 70 new churches and monasteries.

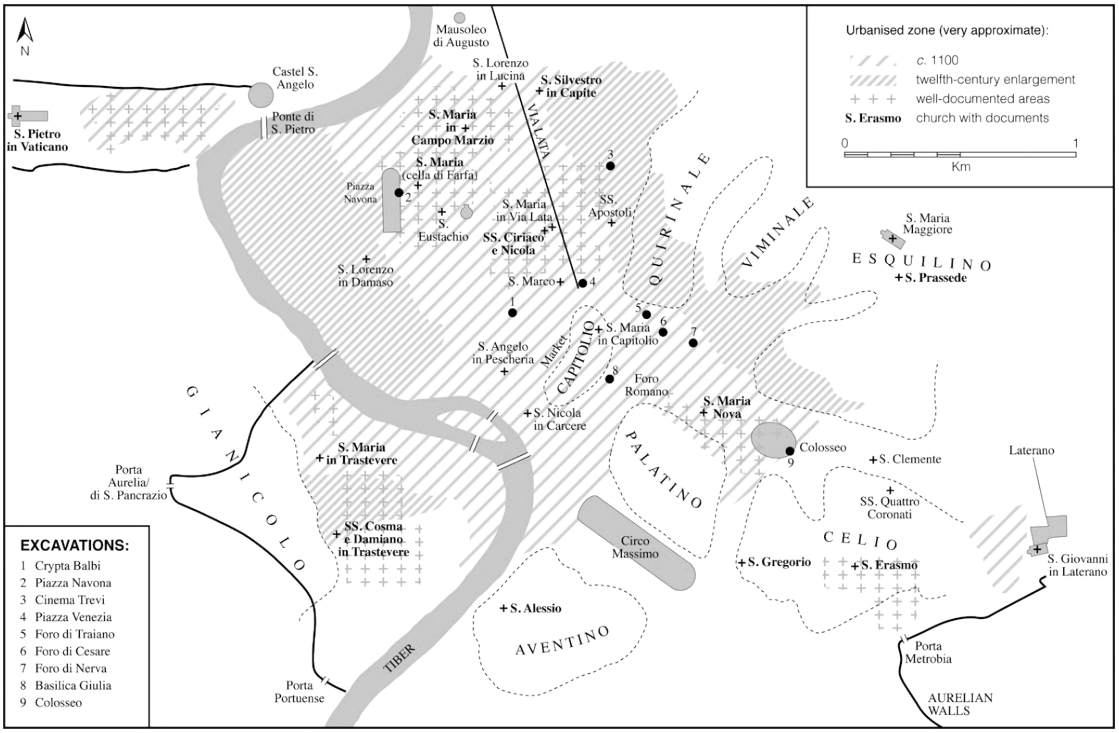

Figure 2: Map of the urban centre of medieval Rome (Source: Wickham 2014, Map 5, p. XXV)

Such growth hit its peak by the start of the fourteenth century. In general, estimates are varied, as before the fourteenth century they are largely guess work rather than reliable data, as there is little evidence confirming them. However, while some scholars are too cautious, or pessimistic, in estimating a maximum of 30,000 inhabitants, those of 40,000 or even 50,000 seem more realistic, especially because the first hypothesis is not really possible if we assume that in the tenth century the population most likely had already reached 20,000 to 30,000 inhabitants.[19] However, the crisis and the epidemic of the fourteenth century also affected the population,

[19] See É. Hubert, 'L'organizzazione territorial e l'urbanizzazione', in Vauchez, *Roma medievale*, pp. 159-186.

meaning a decline is likely, however the extent of such impacts is.[20] Finally, from the end of the fourteenth century the growth was renewed, reaching a peak of almost 60,000 inhabitants in 1526, as calculated from *Descriptio Urbis*, a census made the year before the sack of Rome.[21]

1.3.2 - Settlement

Yet by the start of the fourteenth century, Rome was no longer the largest Italian city in terms of population.[22] The actual area of the city inside the walls was enormous, but not fully inhabited.

During the Middle Ages Rome had a very complex settlement pattern because its occupation was fragmented, evidence of settlements irregularly scattered around the modern city can still be seen today, a likely consequence of uninterrupted occupation of the city. For example, in 1341 the poet Petrarch was surprised by the contrast between the amount of people living in the city and the amount of empty spaces, which could have sustained a larger population.[23] As will be explained below, such negative and oversimplified explanations have been put aside: *abitato* (inhabited places) and *disabitato* (uninhabited places) existed side by side, explaining why this pattern of dispersal was often misunderstood. Krautheimer was among the first to recognise that there were several uninhabited areas within the city, hypothesising that the settlement was concentrated on the Tiber (Fig. 3).[24] Thus, there was a clear contrast between highly populated areas and several uninhabited spaces.

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[20] See É. Hubert, *Espace urbain et habitat à Rome du Xe siècle à la fin du XIIIe siècle*, (Rome, 1990), pp. 64-65, and É. Hubert, 'Rome au XIVe siècle : population et espace urbain', in *Médiévales*, n.40, 2001, pp. 43-52, and Vigueur, *L'altra Roma*, pp. 6-10.

[21] See A. Esposito, 'La città e i suoi abitanti', in A. Pinelli (ed.), *Roma nel Rinascimento*, (Rome, 2001), pp.3-47.

[22] Ibid.

[23] See Hubert, 'Rome', p. 65

[24] See R. Krautheimer, *Rome: Profile of a City*, pp. 271-288.

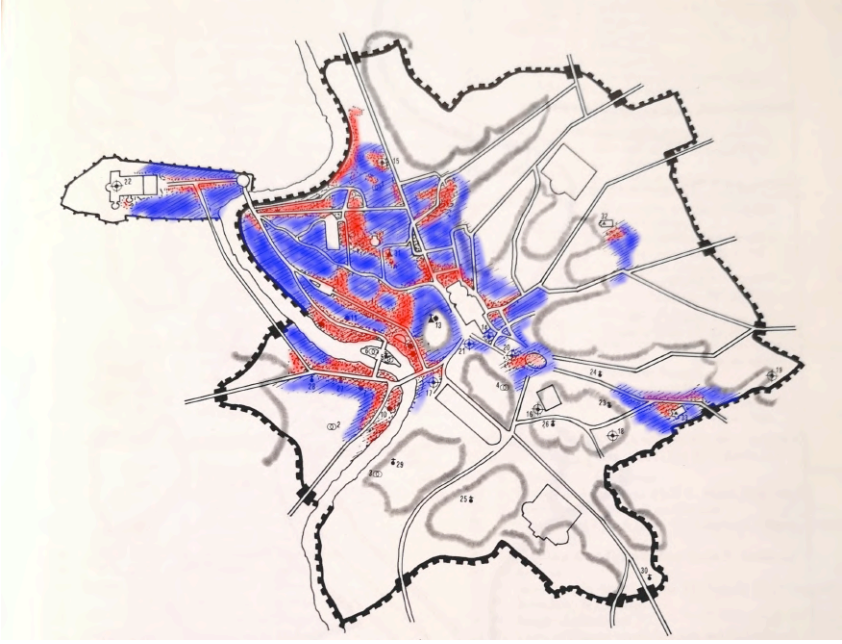

Figure 3: The growth of *Abitato*; keys: Red – *Abitato* before ca. 1050; Blue – *Abitato* after ca. 1050. (Source: Krautheimer 1980, Map 193a, p. 245)

This first hypothesis, which lacked clear evidence, has been nuanced during the last two decades by more recent archaeological and topographical analysis. As for the latter, the analysis of specific information from written sources, such as the position of the so-called *diaconiae* and birthplaces of some popes has demonstrated that there were people living in the areas that were supposed to be uninhabited, mainly the hills,[25] while less than 40% of research refers to the area of the Tiber, thus contradicting Krautheimer's hypothesis. In addition, archaeological data have confirmed such dispersed settlement, as evidence of dwellings has been found in several sites, among which the aforementioned excavations in the area of Imperial Fora are the best example. Although it is credible that the areas of the Tiber meander were quite populated, there was no clear contrast between a densely populated area and many empty spaces. The *abitato* could be found in every part of the classical city that was thus characterized by a succession of buildings, fields and ruins, as it was a sequence of several villages *intra muros*.

This wide dispersal has been analysed by Hubert, who insisted on both the

[25] See Wickham, *Medieval Rome*, pp.114-116.

ruralisation of the city, and the absence of a city centre.[26] Between the tenth and the first half of the eleventh century, Rome was a city without a clear internal organisation, and most likely it appeared as a series of rural and urban spaces. Such a settlement did not change before the second half of the eleventh century, when the positive trend of the urban economy, and hence increased urban population, caused rapid urbanisation, with the peak of the population reached at the start of the fourteenth century.

In addition, the monumental presence of the ancient buildings, or their ruins, must be considered as medieval dwellings were often built partially reusing them. For example, the case of the *domus solaratae* found in Forum of Nerva, which were based on ancient structures, and the *cryptae* inside Colosseum. The latter, although phases analysed here are dated to the late twelfth century, is indicative of a constant reuse of both space and building materials. In particular, the reuse of spaces inside ancient buildings was so common that contemporary documents use the specific word *crypta* to indicate such spaces. Other forms of occupation, mostly dwellings or buildable spaces, are described differently, such as *domus solarata*, *domus terrinea*, and *terrae vacantes ad domos faciendas*, later known as *casilina*, meaning a buildable space.[27] The same documents clearly show that most of those properties were owned by churches and monasteries, and the role of lay owners started to be more important from the second half of the twelfth century. Finally, in regard to aforementioned urbanisation, its rapid increase corresponds to the increase of the population, and to the positive economic trend of that period. In fact, only from the end of the thirteenth century this positive trend progressively decreased, and this has been interpreted as one of the first symptoms of the fourteenth century crisis.

[26] See Hubert, 'Rome'.

[27] See Hubert, *Espace urbain*, pp. 127-133.

1.3.3 – Residents

But who were the people living in the "new" medieval Rome? It is obvious that, like the landscape of the city, society deeply changed as well. Firstly, Roman society before the eleventh century is difficult to analyse due to the scarcity of written sources, with documents becoming more common at the end of the tenth century.[28] Yet, it is possible to identify the main changes involved, and consequently affected the development of the city as well. While for some social classes such analysis is easier, as they were the easily identifiable characters of socio-economic Roman life, less is known about the *plebs* (or *populus*), an overly generic word indicating the common people, the majority of population.[29] Furthermore, it is true that both the most numerous sources and the fascination for the *nobiles* among the historians, have caused a richer historiography about such upper classes, which presently can be analysed in detail, but that should not be overestimated.[30] By contrast, recent studies have focused on this multitude of people and in some cases it has been possible to discover their names.[31]

Thinking of the élites as a homogenous and fixed group would be a mistake, as from the tenth to the fourteenth century several changes impacted the upper classes, characterised by a great dynamism, influencing the political and economic system of Rome. In the dynamic political system of Rome it was common that new families were able to emerge. During this period it is possible to recognise at least three main changes.[32]

The first group is what Wickham defines as the true "old aristocracy" and is known in the written sources as *optimates* or *primates Romae*. These were the old noble

[28] See Wickham, *Medieval Rome*, pp. 6-12.
[29] See Wickham, *Medieval Rome*, pp. 260-266.
[30] For example, see Carocci, *Baroni di Roma*, note 541; Vigueur, *L'altra Roma*, note 4, pp. 150-199, and C. Wickham, *Medieval Rome*, pp. 181-258.
[31] C. Wickham, *Medieval Rome*, pp. 261-278.
[32] See note 30.

families dominating the political life of Rome between the eighth and the first half of the eleventh century.[33] These families were related to the traditional hierarchies of Rome (ecclesiastic, military and civil) and in the *Liber Pontificalis* their members appears to always be involved into one of these hierarchies. Even families identified themselves in these hierarchies and their aristocracy depended on being involved within the city's government. But the Roman aristocracy of this period was not fixed and often it was possible for new families to emerge. In particular, during the first half of the eleventh century, a new class of noble families started to emerge, which, by the end of the century, had progressively replaced the old aristocracy, mentions of whom gradually disappeared.

This "new aristocracy", whose importance has been stressed by Maire Vigueur, was more concentrated on military careers, and was strongly connected with the life of the city.[34] One of the most famous families of this new aristocracy were the Frangipane, owners of part of the Colosseum (Chapter 5). This family was already mentioned in the tenth century, referring to their ancestor Pietro Imperiola, who participated in the synod of 963.[35] It is significant that he is called a member of the *plebs*, and most likely his son and some of his grandchildren were merchants, but their rise was so rapid that between the second half of the eleventh century and the twelfth century they became one of Rome's richest families. Similar rises also characterised other important families of the same period, such as Pierleoni and Corsi.[36]

The importance of this new aristocracy has often been under-estimated, mostly because it was less striking than the supremacy of the barons, who were the new powerful aristocracy of the thirteenth century. From the first half of the thirteenth

[33] See Wickham, *Medieval Rome*, pp. 182-258.
[34] See Vigueur, *L'altra Roma*, pp. 150-199.
[35] See Wickham, *Medieval Rome*, pp. 293-305.
[36] See Wickham, *Medieval Rome*, pp. 182-253.

century a few families who were already part of the aristocracy started to significantly increase their power and wealth, distinguishing themselves from the broader group of the twelfth century aristocracy. The barons became the main characters of the Roman politics of that period, and these families, such as Orsini, Colonna and later Caetani, had a significant influence on Rome. In particular, the members of those families performed the most important roles, such as trying to support their relatives as much as possible. Thanks to such kinds of favouritisms, the so-called nepotism, the scale of the barons' power became very impressive, demonstrated by their owning most of the hinterland of Rome, which was divided into hundreds of *castra* (castles) with their lands and villages, in addition to in addition to their *palatia* within the city.[37] Only in the area of Lazio, Carocci calculated 60 *castra* in 1240, 100 in 1277, and more than 150 in 1300, which were all controlled by one of the Roman baronial families. Therefore, it is clear that landed property was one of the main features of such powerful class.

At the same time, the eleventh century aristocracy did not just disappear, as had happened to the old aristocracy of the ninth and tenth centuries. By contrast, they maintained a certain wealthy status, although their power was not comparable with the barons'. In particular, Maire Vigueur, who called them *nobiles viri*, insisted on the strong connections that used to bring these people together. However, baronial families are characterised by contrasts and fights between them: indeed, it is from the thirteenth century that the Roman landscape started to be massively fortified, as it is still possible to see from the numerous intact or partial towers dated to that period. Contemporary written sources describe Rome as being devastated by internal and violent fights, as each family fought for the supremacy. These situations reached their peak when the papal court was transferred to Avignon (1309–1377), leaving the city in chaos until the last attempt by Cola di Rienzo of reforming the

[37] See Carocci, *Baroni*, pp. 69-88.

government of Rome in 1347.[38]

From this *excursus* on the Roman élites, it is clear that they had a significant role in Roman life, even modelling the landscape of the city itself. Yet, it is crucial not to under-estimate the role of popes, as their relationship with the various aristocracies significantly influenced the socio-political game of medieval Rome. In fact, it is most likely, thanks to the economic support of the *nobiles viri* to the popes that allowed them to rapidly emerge from the second half of the eleventh century. Alternatively, for the barons, their fortunes came mostly from the lands, but such fortunes were used for accessing the most important ecclesiastical roles as well, such as papacy, in order to massively increase their family power. Moreover, we must bear in mind that the presence of the papal court was crucial for the economic dynamism of Rome, and its absence influenced the fourteenth century crisis. Overall, the aristocracy of Rome between the tenth and fourteenth century is characterised by several changes, which had both political and socio-economic consequences. Here, our focus is on the economic consequences of the division between a period characterised by the dynamism of the *nobiles viri*, and the more static economy promoted by the baronial families.

When examining the other classes, it is more difficult to identify them and even the written sources are vague as they refer to them generally as *plebs*.[39] Furthermore, it must be considered that the available documents largely cover important transactions, thus the resulting image is entirely partial. Nevertheless, as demonstrated by Wickham, among such groups it is possible to identify some middle-class families, called medium élites.[40] It is difficult to clearly identify boundaries between such groups, with even contemporary sources using non-specific wording to define them. In addition, the typical social mobility of the period

[38] See Anonimo Romano, *Cronica*, edited by G. Porta, (Milan, 1979).
[39] Wickham, *Medieval Rome*, pp. 260-266.
[40] Wickham, *Medieval Rome*, pp. 260-271.

before the thirteenth century makes such boundaries even more vague, as some families were able to move from one class to the other with ease. In general, the so-called medium élites were characterised by some common features, such as their social mobility, artisanal origins and especially their importance as members of the local communities that gravitated towards some main churches. In addition, the documents from church archives show that their wealth was heterogeneous, as some of them were richer than others. For example, in the case of Tebaldo di Tebaldo, identified by Wickham as the heir of a "new aristocracy" family, his will shows he was quite rich, as it mentions one house within the city, some lands and several other properties, but not rich enough to be part of the aristocracy.[41] Other examples come from the documents regarding property divisions between siblings: in the documents from the archive of S. Maria Nova (see Chapter 5), the properties of the sons of Romano di Frasia are described.[42] In 1157 their heritage was a house inside the Colosseum, a few cultivable lands outside the city, and a mail-coat. A wedding document dated to 1173 lists the properties of one of Romano's sons, including one *domus* and one *crypta* inside the Colosseum, and at least four or five plots outside the city. His properties almost doubled in less than twenty years, confirming again the great dynamism typical of this period.

Nevertheless, such results cannot be considered complete, as they show only the richest classes. For the rest of the *populus*, the documents mention many different people with various professions, and yet there is minimal information on people who were not part of the "upper" classes. In fact, only witness lists give us information regarding the profession of the witnesses. Most are dated to the eleventh century, and after changes in the typology of documents during the late eleventh century, mentions of professions became even rarer. In addition, the first notarial register for Rome, dated 1348, a more detailed source regarding the artisans comes

[41] Wickham, *Medieval Rome*, pp. 274-278.
[42] Wickham, *Medieval Rome*, pp. 275-278.

mostly after the second half of the fourteenth century.[43] Despite this, it is possible to have a rich overview of the variety of artisans working in the city between the tenth and the fourteenth century, clearly in contrast with the old *cliché* that pointed to Rome as an unproductive and parasitic city.[44] There were workers of leather, metal, cloth, wood, ceramics, glass, soap, and so on. In particular, Wickham has noticed that each region of the city seems to have specialised in certain kinds of productions. For example, Trastevere was known for its leather workers and potters (*figuli*), while the area around the church of S. Maria Nova in Forum was known for bronze workers (*erarii*), shoemakers, pelterers and furriers (*pelliciarii*). It is clear that such variety of professions (and thus products) was unusual for Italian cities before the twelfth century. Therefore, Rome was unique indeed, despite the variety of written sources and absence of documentation for each area, which preclude further detailed analysis of such regional divisions. However, it is likely that such division was not as well defined as it seems from the documents.

Regarding potters, who are our focus here, we must mention again Lori Sanfilippo's work on artisans. Using Roman documents of the fourteenth century, she analysed the numerous mentions of different artisans. In particular, potters are among the few cases for which it has been impossible to verify the existence of a guild, even though their existence is undeniable.[45] More recently, Rascaglia and Russo have summarised what we know so far about ceramic production in Rome, from both archaeological and historical points of view.[46] Archaeologically, the first issue that stands out is the absence of pottery kilns in Rome: before the fifteenth century there is in fact no archaeological evidence of kilns within the city, as the only known kiln is dated

[43] See Lori Sanfilippo, pp. V-VII.
[44] Ibid., and Wickham, *Medieval Rome*, pp. 138-155.
[45] See I. Lori Sanfilippo, *La Roma dei Romani*, pp. 386-389.
[46] See G. Rascaglia, J. Russo, 'La ceramica medievale di Roma: organizzazione produttiva e mercati (VIII-XV secolo)', in A. Molinari, R. Santangeli Valenzani, L. Spera (eds.), *L'archeologia della produzione a Roma (secoli V-XV) – Atti del convegno internazionale di studi, Roma 27-29 Marzo 2014*, (Rome, 2015), pp. 279-308.

between the thirteenth and the fourteenth century and was used for bricks. It is clear that the absence of medieval kilns is coincidental, since the archaeological knowledge of the city is still scattered. However, some potters are mentioned in the documents as witnesses already from the eleventh century: for example, we find mention of *figuli* in eight documents dated to the eleventh century and in two documents dated to the twelfth century.[47] Despite this, there is no information about the location of their shops (and kilns), as these potters are mentioned only generally. Six of the eleventh-century documents and both of the twelfth-century documents come from the archives of the church of Ss. Cosma and Damiano *in Mica Aurea*, in Trastevere. In particular, one document dated to 1047 mentions two spaces that have been interpreted as potters' workshops, one rented by Romanus, described as *vir honestus figulus*, and one owned by Paulo *lagunarius*: this is the only evidence that can be related to the presence of either a kiln or a workshop in Trastevere. In fact, the group of the potters is not clearly defined among the various groups of artisans living in Rome, despite from the fourteenth century onwards the documents become more consistent, it is still difficult to locate the potters within the urban area. By contrast, the documents use several different words for referring to the potters, such as *figuli*, *lagunarius*, and (later) *vascellarius*, thus letting us hypothesise that there was an early specialisation of such group of artisans. Regarding the archaeological evidence of these *figuli*, the numerous archaeological excavations of the last three decades have added new data to the information that can be obtained from the documents. However, such data mostly comes from production wastes (Figs. 31 and 32). In particular, a recent study by Giorgio Rascaglia and Jacopo Russo examining all archaeological indicators of production found within Rome shows that the most consistent group of ceramic wastes were located in the area of Imperial Fora and close by Piazza Navona, whereas evidence is lacking of ceramic production from Trastevere. Such kinds of overall work about the productions of medieval Rome

[47] Ibid., pp. 189-195.

have demonstrated that there was a variety of professions described in the documents. This finding corresponds to a similar variety of archaeological evidences of production, whose importance is related to the fact that this is the first attempt to connect archaeological and historical evidences. At the same time, it demonstrates the necessity of such interdisciplinary work, especially in the case of such a complex city as Rome.

In summary, the image of medieval Rome has greatly changed over the last two decades, and recent analyses of the available documentation demonstrate that medieval Rome was not greatly different from other Italian cities, with its main difference likely being the early date of changes. Towards the end of this period, such vitality and economic growth entered decline, as in the crisis of the fourteenth century; however, it is likely this decline began in the late thirteenth century, when barons emerged. It is clear that the political changes that involved Rome during that period also had consequences on the economic life. Therefore, the aim of the next section will be to highlight the value of ceramics within this broader socio-economic narrative.

1.4 – Medieval Ceramics: State of the Art

In broad terms, studying the development of medieval ceramics in Italy can be challenging, because while ancient Roman production has been studied systematically, this is not the case for the medieval ceramics. There are many reasons which contribute to this, such as medieval archaeology in Italy being relatively new as a discipline; David Whitehouse on wrote such in 1967, and this is partly still true, as its analysis is not as systematic as the classical yet.[48] In addition, there are no synthetic works on medieval ceramics, with the regional fragmentation typical for

[48] See D. Whitehouse, 'The Medieval Glazed Pottery of Lazio', in *Papers of the British School at Rome*, vol. 35, 1967, pp. 40-86.

Italian medieval history is reflected in regional ceramics studies.[49] However, there are more general works available that can be briefly analysed before our attention goes on Rome.

1.4.1 – General works

Firstly, there are the volumes by Ninina Cuomo di Caprio, *La ceramica in Archeologia: antiche tecniche di lavorazione e moderni metodi di indagine* (1985 and 2007), in which the approach is mostly scientific, featuring analyses of different clays and their chemical structures.[50] In particular, these volumes are interesting in the analysis of how vessels obtained different claddings. This work is highly technical, but is useful in order to set out the structures of the pots and the production processes. Another important work that uses a general approach to ceramics is David P. S. Peacock's *Pottery in the Roman World: An Ethnoarchaeological Approach* (1982).[51] Peacock focuses on ancient Roman ceramics, but the volume is fundamental for its interdisciplinary position. He proposes different models of ceramic production, based on ethno-anthropological comparisons, thus there are different production systems, which depend on the kind of society, which can be applied case by case. However, the focus on the classical world means that the categories in which the kinds of production are divided can only be applied with difficulty to the economy of a medieval city, as we will discuss in the Conclusions.

[49] For example, one of the few regions for which we have a more complete analysis is Liguria: T. Mannoni, *La ceramica medievale a Genova e nella Liguria*, (Genoa, 1975).

[50] See N. Cuomo di Caprio, *La ceramica in archeologia: antiche tecniche di lavorazione e moderni metodi d'indagine*, (Rome, 1985), and N. Cuomo di *Caprio Ceramica in archeologia 2: antiche tecniche di lavorazione e moderni metodi di indagine,* (Rome, 2007).

[51] See D. P. S. Peacock, *Pottery in the Roman world: An Ethnoarchaeological Approach*, (London and New York, 1982).

Pottery in Archaeology by Clive Orton, Paul Tyers and Alan Vince in its first edition (1993),[52] has become a cornerstone of quantification analysis and is crucial as a first step into ceramic studies. The first part of the book is more historical, citing how ceramics have been studied so far and explaining their potential within archaeological contexts. The second part is a type of technical guide regarding how to process and record ceramics. The third considers themes such as quantification, chronology, production and distribution. It is clear that *Pottery in Archaeology* combines the approaches of the first two works cited, despite focussing more on the quantification issues. Nevertheless, its general approach is very useful for those new to studying ceramics.

The *Oxford Handbook of Archaeological Ceramic Analysis*, edited by Alice Hunt (2017) should be also mentioned, as it is a detailed volume that focuses on the current types of analysis available for ceramics, mostly chemical and mineralogical such as isotope analyses and x-ray fluorescence.[53] In part, therefore, the volume is technical, since most of the analysis suggested requires complex and specific methods. However, the value of chemical analysis and anthropological comparisons is undeniable, and as such cannot be used as preliminary "guides" into the study of ceramics.

Instead, something that summarises vessel classes and forms is still required, at least regarding medieval productions. In particular, using the divisions explained by Orton, we could compare what he calls the "typological phase" to the current state of the Italian studies of ceramics:[54] as we will see, most of the publications are still focused on creating typologies, rather than contextualising them. Furthermore, each area has developed its own studies and tradition, thus resulting in a fragmented

[52] See C. Orton, P. Tyers, A. Vince, *Pottery in Archaeology*, (Cambridge, 1993); C. Orton, M. Hughes, (Cambridge, 2013), for the revised second edition.
[53]See A. Hunt, *The Oxford Handbook of Archaeological Ceramic Analysis*, (Oxford, 2017), pp. 305-326 and 342-362.
[54] See Orton, *Pottery in Archaeology*, pp. 219-234.

knowledge of Italian medieval ceramics. Clearly, this affects the results, as it is difficult to provide wider economic conclusions, and accordingly, one must study and analyse as many articles and reports as possible, which may be based on different methods. However, there are some works that can be used as guidelines for a study of the medieval ceramics of Rome, as outlined below.

1.4.2 – Medieval Rome

The most important work for the medieval ceramics of Rome is, undoubtedly, that related to the site of *Crypta Balbi*.[55] In fact, the excavation that started in the 1980s is still the most important for a number of reasons: it was the first huge urban excavation performed in the centre of Rome and its collection of archaeological finds is probably the largest in the city, including many materials besides ceramics, such as glass and metalwork. The excavations have been published almost uninterruptedly, through a series of seven volumes since 1982, relating to the results of the archaeological excavations undertaken between 1982 and 1985. The ceramics evidence was the largest, and has generated different articles and reports, each focusing on a specific class. All the typologies for each class are set out in chronological order. These types are complemented by drawings, creating a catalogue that remains the main work of reference.

[55] See: D. Manacorda (ed.), *Archeologia Urbana a Roma: il progetto della Crypta Balbi*, (Florence, 1982); D. Manacorda (ed.), *Un «mondezzaro» del XVIII secolo. Lo scavo dell'ambiente 63 del Conservatorio di Santa Caterina della Rosa. Archeologia urbana a Roma: il progetto della Crypta Balbi, 2*, (Florence, 1984); D. Manacorda (ed.), *Archeologia urbana a Roma: il progetto della Crypta Balbi. 3. Il Giardino del Conservatorio di S. Caterina della Rosa*, (Florence, 1985); A. Gabucci, L. Tesei (eds.), *Il Giardino del Conservatorio di S. Caterina della Rosa. Supplemento. Archeologia urbana a Roma: il progetto della Crypta Balbi 4,* (Florence, 1989); L. Saguì, L. Paroli (eds.), *Archeologia Urbana a Roma: il progetto della Crypta Balbi. 5. L'esedra della Crypta Balbi nel Medioevo (XI-XV secolo)*, (Florence, 1990); D. Manacorda (ed.), *Crypta Balbi archeologia e storia di un paesaggio urbano*, (Milan, 2001); M. Ricci, L. Venditelli, (ed.), *Museo Nazionale Romano - Crypta Balbi: Ceramiche medievali e moderne. I. Ceramiche medievali e del primo Rinascimento (1000-1530)*, (Milan, 2010); and M. Ricci, L. Venditelli (ed.), *Museo Nazionale Romano - Crypta Balbi, ceramiche medievali e moderne. 2. Il Cinquecento (1530-1610*), (Milan, 2013).

However, because of the importance of the *Crypta Balbi*, subsequent work is more focused on creating comparisons with it instead of adding new data. Nevertheless, because of its detailed coverage and range, this collection is uniquely valuable. As mentioned above, everything has been published, and while Volumes 3 and 5 mostly focus on medieval production, the others present mainly post-medieval ceramics. In addition, the systematic analysis of both the finds and the stratigraphy has resulted in highly precise chronologies for the medieval and post-medieval ceramics circulating in the area of Rome, even confirming the chronologies of other collections excavated prior, such as the assemblage found at S. Cornelia (outside of Rome) that will be discussed in Chapter 2. In conclusion, despite some limits the *Crypta Balbi* excavations contain most of the medieval classes that have been dated precisely. Moreover, this excavation is still the only example in Rome of an overall analysis of a context, from excavation to museum, where it is possible to see most of the findings, especially ceramics.

Besides *Crypta Balbi*, most of the other works published on Rome's medieval ceramics are articles or reports, but only a few of these can be considered as overall works.

We can begin with Giacomo Boni who made the first discovery and record of medieval ceramics at the start of the twentieth century at the *Lacus Iuturnae* in the Roman Forum, where he discovered 80 whole jugs, one fragmented and about 1500 fragments of a "new" class, since then called Forum Ware. This caused a debate about Forum Ware's chronology and origins and many scholars have since written about it, trying to make comparisons with other known contexts. However, without reliable stratigraphic data it was almost impossible to define its chronology, and, as a result, the debate has carried on, even as new data were generated through new excavations.

Regarding this class, which was the first recognised as "not-classical", it is essential to mention Otto Mazzucato's studies, who was the first to fully acknowledge Forum Ware and tried to associate it with a tenth-century chronology, which has been partly confirmed by *Crypta Balbi*.[56] Mazzucato was a great innovator, because the collections he studied are no longer visible anymore, as often they are inaccessible or even lost.[57] Following him, David Whitehouse's work on medieval ceramics started in the 1960s and the 1970s, being innovative because one of his aims was to define the origin and development of glazed pottery and the Italian Majolica.[58] In fact, Whitehouse tried to consider them in wider contexts, looking for similarities and connections. In particular, he argued for Byzantine origins to the glazed ceramics, as we will see, this was not far from truth (see Chapters 2 and 4). Furthermore, he was the first to realise the importance of connecting ceramics found in the environs of Rome, such as from the excavations at early medieval papal estates Santa Cornelia and Santa Rufina, to the production of the city. This major comparative study was completed by Helen Patterson, as part of the major Tiber Valley Project, promoted by the British School at Rome and co-directed by Patterson herself. [59] In addition, we must bear in mind that many of these studies were carried out when excavations were happening in *Crypta Balbi*, meaning that it was possible to progressively compare the results. Obviously, some results have changed since then. For example,

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[56] In particular, see O. Mazzucato, *La ceramica a vetrina pesante*, (Rome, 1972), and O. Mazzucato, *Tipologie e tecniche della ceramica a vetrina pesante IX-X secolo*, (Rome, 1993), pp. 25-27. Mazzucato has argued that this might be not as reliable as it has been made as, most likely, various vessels from areas nearby had been put together and labelled as from the *Fons* itself, see. For the discover, see G. Boni, *Il sacrario di Juturna*, (Rome, 1901).

[57] His work is still crucial, since he was a ceramist as well, and so understood some technical features little known otherwise.

[58] See D. Whitehouse, 'The medieval pottery from S. Cornelia', in *Papers of the British School at Rome*, vol. 48, 1980, pp.125-156, and D. Whitehouse, 'Ceramica Laziale', in *Papers of the British School at Rome*, vol. 44, 1976, pp.157-170, and N. Christie (ed.), *Three South Etrurian Churches: Santa Cornelia, Santa Rufina and San Liberato*, Archaeological Monographs of the British School at Rome, Volume 4, (London, 1991).

[59] See note 58, and H. Patterson, 'La ceramica a vetrina pesante (Forum Ware) e la ceramica e vetrina sparsa da alcuni siti nella Campagna Romana', in L. Paroli, *La ceramica invetriata tardoantica e altomedievale in Italia, Atti del seminario: Certosa di Pontignano (Siena), 23-24 febbraio 1990*, (Florence, 1992), pp. 418-434.

since the data suggested by the Santa Cornelia excavation, Forum Ware has been dated to somewhat earlier than mid-ninth century, and Sparse Glazed to not much later than the later mid-ninth century. Furthermore, we will see these chronologies have been refined following more recent excavations.

It is evident that during the 1980s "new" interest in Roman medieval phases prompted several research excavations, creating a huge quantity of ceramic data, which are still the foundation for every pottery researcher. In fact, it can be said that they are real models not only for recording practices, especially for recognising types and for dating. In addition, all the articles published since the 1980s follow these innovative scholars and are becoming ever more precise. Good examples of this are seen in the recent volumes about findings from the Imperial Fora, one published in 2006, the other in 2013.[60] These volumes combine both the typological approach and the contextual phase and focus in particular on quantification and methods. References to *Crypta Balbi* are constant, but at the same time one of their aims is going beyond the lack of information that is typical of pottery studies. In these volumes, many contexts that are close to each other have been published and compared. In this way, it has been possible to reconstruct some of the use of the whole area of the Imperial Fora from the classical to the modern period.[61] Cross-references to *Crypta Balbi* are crucial, because they enable scholars to link different situations, both in terms of time and space. In general, the finds from the Fora are extremely heterogeneous, and the chronologies of ceramics are very long. On the one hand, material from here has been studied in order to collect more precise information about both classes and their chronologies. On the other hand, the importance of the issues related to quantification have demonstrated how necessary

[60] These volumes are: R. Meneghini, R. Santangeli Valenzani (eds.), *Roma - lo scavo dei Fori Imperiali: 1995-2000: i contesti ceramici*, (Rome, 2006), and Ceci, *Fori Imperiali*.
[61] In particular, see M. Ceci, *Fori Imperiali*, pp. 1-9.

it is to work on wider contexts, which can include various sites, with the aim to analyse the city, rather than single sites.

Notably, in 2016, the volume *La ceramica nello scavo archeologico: analisi, quantificazione e interpretazione* was published by Monica Ceci and Riccardo Santangeli Valenzani,[62] which discusses which quantification methods are more reliable currently and how to use these results for wider interpretation. This book is a successor to the volume first published by Orton *et al.* in 1993 and discussed above,[63] but is more confident than its predecessor about the possibilities offered by the use of reliable quantification methods on large samples, most likely because it has been used for specific samples. For example, it demonstrates that we can increase our general knowledge about the city's economy during the Middle Ages by thinking about the city as a whole, rather than a group of separate cases and then analysing them as a mass group. This approach, considering ceramics as part of a wider context, was discussed in 2003 by Alessandra Molinari, who saw the potential of these kind of studies.[64] In this sense, the 2016 volume after explaining all the main approaches to ceramics suggests a new and coherent starting point for the future studies.

Yet the sites discussed comprise only a small portion of the city centre. There have been many medieval archaeological excavations during the last thirty years; but unfortunately, when the ceramics research was published, this mostly examined the site alone. This is the case, for example, for most of the ceramics found in the Colosseum, which despite being mostly published, has never been considered as a whole. As will be analysed in Chapter 5, the various excavations within the monument have not even been compared with each other and the first attempt to do

[62] See M. Ceci, R. Santangeli Valenzani, *La ceramica nello scavo archeologico. Analisi, quantificazione e interpretazione*, (Rome, 2016).
[63] See note 52.
[64] See A. Molinari, 'La ceramica medievale in Italia ed il suo possibile utilizzo per lo studio della storia economica', in *Archeologia Medievale,* 30, 2003, pp. 519-528.

so is presented in this thesis. In addition, like S. Cornelia,[65] there are many other contexts that have returned medieval ceramics from rural sites, such as Mazzano Romano, Anguillara, Santa Rufina, Mola di Monte Gelato, Ostia and, more recently, the sites of Villamagna and Tuscolo.[66] In fact, we must bear in mind that history and progress of these sites around Rome were strictly related to Rome itself, as the city depended on its hinterland and vice versa. As a consequence, it is likely that changes affecting ceramic production in Rome influenced neighbouring sites. More specific studies about such connections are still lacking, but it would be interesting to be able to examine such topics in detail. Here, such studies fall outside the scope of this thesis, which focusses on the internal economic structure of a city

However, despite the lack of homogeneity in ceramics studies, much has been done since the publication of the *Crypta Balbi* volumes. In general, while the approach still remains mainly typological, new ideas related to economic issues are more common than before. Interest in medieval productions in Rome has increased, and in some chemical analyses of the clays have been made in order to find the place of production. At the same time, historical interest about the population of medieval Rome has grown as well. Some of the best examples are Lori Sanfilippo's book, *La Roma dei Romani. Arti mestieri e professioni nella Roma del Trecento*, which analyses

[65] See note 58.

[66] See note 32; V. Beolchini, 'Spazio sociale e spazio domestico nel Lazio medievale: il caso di Tuscolo', in S. Gutiérrez Lloret, I. Grau (eds.), *De la estructura doméstica al espacio social: lecturas arqueológicas del uso social del espacio*, (Alicante, 2013), pp. 223-236; E. Fentress, C. J. Goodson, 'Villamagna (FR): l'eredità di una villa imperiale in epoca bizantina e medievale', in *Archeologia Medievale*, 39, 2012, pp. 56-86; E. Fentress *et al.*, *Villa Magna: An Imperial Estate and Its Legacies: Excavations 2006-10*, (Rome, 2017); H. Patterson, 'Produzione e circolazione di ceramiche tardoantiche ed altomedievali ad Ostia e Porto', in P. Delogu, L. Paroli (eds.), *La storia economica di Roma nell'alto Medioevo alla luce dei recenti scavi archeologici. Atti del Seminario - Roma 1992,* (Florence, 1993), b, pp. 203-246; H. Patterson, 'Un aspetto dell'economia di Roma e della Campagna Romana nell'altomedioevo: l'evidenza della ceramica', in P. Delogu, L. Paroli (eds.), *La storia economica di Roma nell'alto Medioevo alla luce dei recenti scavi archeologici. Atti del Seminario - Roma 1992,* (Florence, 1993), a, pp. 309-331; G. Rascaglia, J. Russo, 'Dotazione domestica a Tusculum: un aggiornamento del catalogo ceramico medievale', in G. Ghini, Z. Mari (eds.), *Lazio e Sabina 9. Atti del Convegno (Roma, 27-29 marzo 2012)*, (Rome, 2013), pp. 191-195. Excluding Ostia, all these sites are 60-90 km from Rome.

artisans and Roman society in the fourteenth century, and Güll's work on late medieval ceramics ateliers, which remains one of the main points of reference for potters and ceramic production in that period.

In conclusion, it is clear that new and detailed synthetic works on ceramics are required. In fact, despite many reports describing the finds from different excavations, as regards Rome there are no broader scale analyses of medieval ceramics to help explain the history of the city, compared to the archaeological history of one site. The immediate consequence is that, to gain an overview of all the most important medieval classes, one must interrogate many different and heterogeneous articles and reports, which often use different methods. Even in the *Crypta Balbi* volumes, there was limited synthesis, making it difficult to understand the changes of some ceramic classes, especially the coarse wares, as discussed in Chapter 2. Thus, clearly more than other typological works, it is necessary to examine how the analysis of ceramics can add to our understanding of wider economic issues, through the use of statistical methods based on quantifications, analysis of chemical composition of the clays and comparing the archaeological finds to the available written sources. In general, the potential of ceramics analysis has not yet been fully realised, but there have been a number of improvements which give hope of a better awareness of something as essential and basic as pottery in archaeological contexts.

Chapter 2
Classes, Chronologies and Terminology

2.1 – Introduction

Before analysing the three sites that are the focus of this thesis (Chapters 4, 5 and 6), it is crucial to offer an overview of the main productions circulating in Rome between the tenth and fourteenth centuries. First we need to state that each period is characterised by its own recognisable ceramic classes and its own development. Accordingly, we have both the excavation data and the dates of the archaeological deposits to draw upon. But what is a class, and how is it possible to date the archaeological deposits through ceramics?

When working on ceramics the initial step is dividing the sherds into different classes to which they belong. Thus, **class** is the very first division performed upon assemblages, indicating the main groups identifiable based on use, or external features. For example, classical amphorae are one of the best known and studied classes, and the name indicates a substantial group of vessels that had the same function. The chronology and places of production of amphorae are extremely widespread, but the function as vessels for transporting types of liquid goods (and a few solids) is shared across time and space.[67] Continuing with classical productions, the so-called Red Slip Ware is instead identified depending on the way such vessels were produced. The surface of the vessels was covered by a thin layer of purified

[67] For an overview of Imperial amphorae, see T. Bertoldi, *Guida alle anfore romane di età imperiale. Forme impasti e distrubuzione*, (Rome, 2012).

clay, which, after the firing process, became a smooth and shiny red surface.[68] Nevertheless, amphorae and Red Slip Wares are clear examples of different ways of dividing materials into classes and to help demonstrate differences between forms and types.

The **form** of a vessel is related to its utilitarian aim. For example, a cooking pot indicates a specific way of cooking food, and generally a class includes various forms, but there are some exceptions. The class "amphorae" is made up of all the same form, the amphora indeed.[69] As for the use of the amphorae, key was their function as transport containers. Instead, Red Slip Wares comprise various forms, such as basins, dishes, and lamps, the uses of which were clearly different. The **type** is the evolution of each specific form, as each could go through progressive changes of their original shape, depending upon different factors, such as changes related to food habits. For example, in Figure 4 we can see some types of medieval amphorae that, despite being the same of utilitarian form, are very different.

[68] See A. Carandini, S. Tortorella, *Atlante delle forme ceramiche. I. Ceramica fine romana nel bacino mediterraneo (medio e tardo impero)*, (Rome, 1981); S. Tortorella, 'La sigillata africana in Italia nel VI e nel VII secolo d.C.: problemi di cronologia e distribuzione', in L. Saguì, *La ceramica in Italia: VI-VII secolo: atti del convegno in onore di John W. Hayes: Roma, 11-13 maggio 1995 (Vol. 1-2)*, (Florence, 1998), pp. 41-69; G. Olcese, *Ceramiche comuni a Roma e in area romana: produzione, circolazione e tecnologia; tarda età repubblicana-prima età imperiale*, (Mantua, 2003).

[69] The issue regarding amphorae is related to the continuous presence of such forms: for example, in the Middle Ages some amphorae were still being produced, but when being divided into classes, generally they are not counted as part of the class amphorae: by "amphorae" we generally intend the classical amphorae, while many medieval transport amphora types are often counted as Common Wares. This can be seen as well in the sections of *Crypta Balbi*: medieval amphorae are in the chapter of medieval Common Wares.

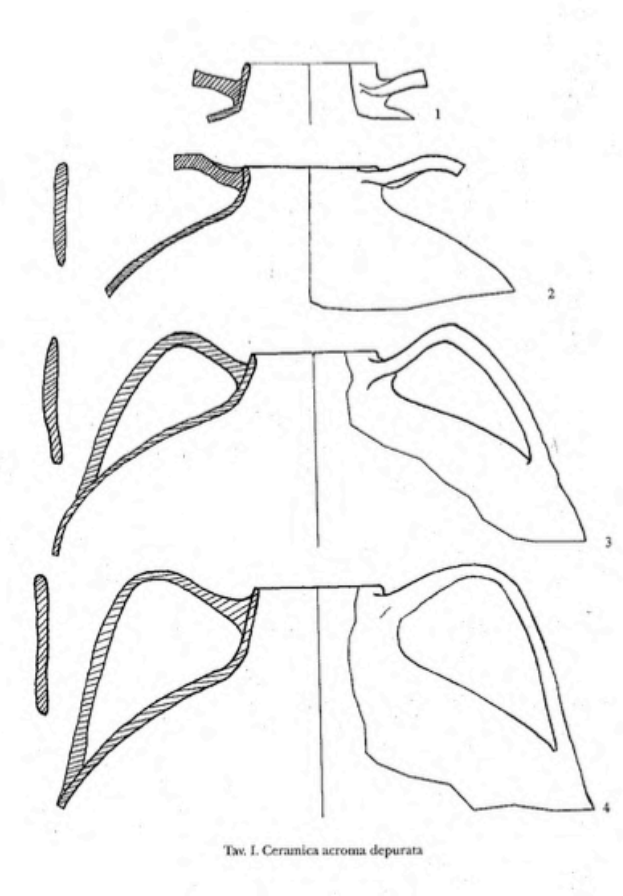

Figure 4: Some examples of medieval amphorae (same form, different types) sherds from S. Omobono. (Source: Giustini 2005, Tav. I, p. 82)

Such changes of types are crucial when trying to set out the chronology of an assemblage. In fact, it is undeniable that some classes are characterised by short and well-defined chronologies, and this is particularly clear for some of the medieval productions we will analyse shortly, such as Latium Ware and Green Glazed Ware, which were produced for no more than 150 years.[70] By contrast, some classes are characterised by chronologies that cover more than four or five centuries. This is the case for both the classical amphorae, generally dated between the third century BC and the sixth century AD and the Red Slip Wares, dated between the end of the first century AD and the end of the sixth. Thus, such kinds of long chronologies are not as useful as we might think for dating archaeological deposits, hence it is crucial to

[70] We will discuss those classes in more detail below. As for the economic meaning of such short productions, see Chapter 7 and Conclusion.

identify the types for each class. In fact, often the types have shorter chronologies, sometimes of two centuries or less. For example, some types of Sparse-glazed jugs found in *Crypta Balbi*, dated to the first half of the thirteenth century and similar to some types of other classes, such as 'common ware' and Latium Ware. Thus, clearly types contribute to have shorter and more precise chronologies. However, at the same time, not all sherds will have the same diagnostic value, since the types are recognisable mostly from the rims and the handles, while often the bases and the walls of a vessel cannot give any kind of chronological information. As we will see, this clearly affects the number of sherds that can be recognised.[71]

Not all the sherds require the same kind of analysis. For example, typological division might be unnecessary for the so-called 'residual' material, as its main aim is to date the archaeological deposit and a deposit is not dated from its residual materials. In fact, another major division among the ceramics is between the residual and in-phase materials. The residual items comprise all the ceramics that can be dated to *before* the formation of the archaeological deposit itself, which is instead dated by the ceramics in phase. There exists a lively debate about how to identify and use what is in phase rather than residual, especially regarding urban excavations in former ancient cities, which are generally characterised by huge quantities of residual finds.[72] In particular, the issue is about the utility of the data from those residual sherds, which have potentially lost their chronological value for the archaeological deposit. In fact, while it is clear that the residual ceramics give information about the phases dated before the deposit that is being excavated, the kind of information that they return is still uncertain. Generally, in-phase the

[71] See Chapter 7.

[72] See C. Cecamore, 'I residui nello scavo archeologico. Esperienze sui materiali residui nello scavo stratigrafico e loro utilizzazione ed interpretazione in siti dell'area romana : il caso del Foro di Nerva', and L. Saguì, A. Rovelli, 'Residualità, non residualità, continuità di circolazione. Alcuni esempi dalla *Crypta Balbi*', in F. Guidobaldi, C. Pavolini, P. Pergola, *I materiali residui nello scavo archeologico. Testi preliminari e atti della tavola rotonda (Roma, 16 marzo 1996)*, (Rome, 1998), pp. 117-123 and 175-193.

ceramics depend mostly on the stratigraphic data, as will be discussed in consideration of ceramics quantification (Chapter 7).

Finally, another important distinction is between fine and coarse wares. The former are classes characterised by their overall *quality* of production, that were almost exclusively used as table-wares.[73] Furthermore, fine wares are often characterised by glazed surfaces of different kinds, such as the lead and the tin surface typical of Forum Ware and Archaic Majolica, but this is not their distinctive feature. Clearly, this difference is not as sharp as explained here, because there are some grey areas. Coarse wares include all those classes that were intended as "common" wares, which were locally produced and generally used for daily activities, such as for cooking, preserving food, or serving food. In addition, while fine wares are generally more recognisable because of their surfaces, and have shorter chronologies, coarse wares include all those classes characterised by longer chronologies and sherds not easily recognisable, if not diagnostic. As discussed below, the coarse wares are also the most problematic to analyse and date precisely.

In summary, **classes** and **types** are crucial in order to **date** an assemblage, but, at the same time, not all classes have the same chronological importance, or are as recognisable as others. Below, the main classes dated to between the tenth and fourteenth century will be described, indicating their features, chronology, main forms and types, and origin, when possible. The examples cited come from the collections mentioned above, chiefly the *Crypta Balbi*. Fine wares will be described first, followed by coarse wares, in order to stress the different kind of approach that their study requires.

[73] By contrast, coarse wares can have different uses.

2.2 - Forum Ware and Sparse Glazed Ware

Among the first classes to be recognised as post-ancient, the so-called Forum Ware was first found in the *Fons Iuturnae* in Roman Forum at the start of 20th century. Now it is also referred to as *ceramica a vetrina pesante*. In the 1970s, Mazzucato published the first modern studies regarding this class and its features, however, the main problem concerned the chronology of such vessels, given the lack of reliable stratigraphic, and thus chronological, information. This issue has been partly resolved thanks to the increase of archaeological excavations across the city and to more accurate stratigraphic data currently available.[74] As a result, it is possible to date Forum Ware from the end of the eighth to the start of the eleventh century. As we will analyse, during that period its features changed and most recent production is significantly different from the first. Furthermore, the latest productions of Forum Ware overlap with the first productions of the so-called Sparse Glazed Ware, meaning that same types of jugs were produced with different glazes. In fact, between the eleventh century and the end of the twelfth the main fine ware circulating in Rome was Sparse Glazed ware, as it totally replaced the previous class.

Forum Ware is characterised by a thick green lead-glaze coating that covers most of the pot; indeed, the first examples dated to the late eighth and ninth century are totally covered by this thick and glossy surface, which likely acted in making the vessels waterproof.[75] The lead-glazed technique was already used during the Roman period, but whether Roman production was characterised by two firings, one for the vessel and one for the glazing, Forum Ware was characterised by a single firing. The

[74] The excavations that have been crucial for dating this class are S. Cornelia, and *Crypta Balbi* (in particular, *Crypta Balbi* 3, pp. 173-244, and *Crypta Balbi* 5, pp. 314-356). Moreover, new data come from the recent excavations in Piazza Venezia, see M. Serlorenzi, I. De Luca, 'Piazza Venezia. Indagini archeologiche della metropolitana: ceramica a vetrina pesante dalle stratigrafie altomedievali', in F. R. Stasolla, G. M. Annoscia (eds.), *Le ceramiche di Roma e del Lazio in età medievale e moderna VII*, (Rome, 2013), pp. 495–520.

[75] See note 2. Moreover, Mazzucato did some experiments for reproducing the Forum Ware cladding; see Mazzucato, *Tipologie e tecniche*, pp. 151-222.

vessels were totally covered by the lead compound just prior to firing, resulting in a glossy surface, from yellow-green to olive green.[76] Moreover, Forum Ware is characterised by some typical attached decorations, called petals (Fig. 5 and 6).

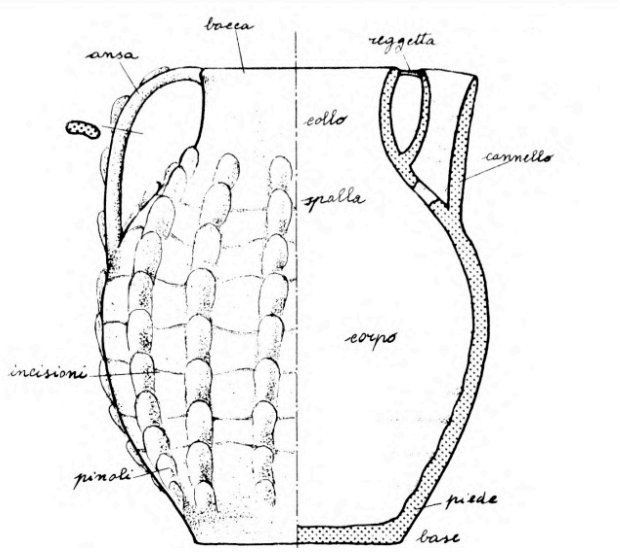

Figure 5: Example of Forum Ware jug. (Source: Mazzucato 1993, Fig. 1 p. 28)

Figure 6: Forum Ware at the Museo dell'Alto Medioevo (Roma), (Source: L. Campagna)

[76] See M. Sannazzaro, 'La ceramica invetriata tra età romana e medioevo', in S. Lusuardi Siena (ed.), *Ad mensam: manufatti d'uso da contesti archeologici fra tarda-antichità e medioevo*, (Pisa, 1994), pp.229-262.

Such decorations cover the whole pot in the earliest examples, but they appear totally irregular in both location and quantity. From the late ninth century, however, the petals are more regular, often on parallel lines, in addition, some vessels are decorated as well with engraved parallel lines beneath the glazed surface.[77] Instead, Sparse Glazed Ware is characterised by a type of spotted glazing, which does not cover the whole vessel and appears patchy. In the latest production, dated to the second half of the twelfth century, this glaze only appears on selected parts, mainly on the neck, or part of the body. At the same time, it is important to observe that the clay used for Sparse Glazed Wares is waterproof, which may have affected the presence of the glazed surface. Regarding decorations, Sparse Glazed Wares are generally not decorated, if we exclude the first production dated to the first half of the eleventh century, which overlaps with the latest production of Forum Ware, with vessels characterised by engraved parallel lines. As for the forms produced, the main repertoires are seen in the assemblages of *Crypta Balbi*, S. Cornelia, and S. Sisto Vecchio, but more recent excavations, such as the excavations in Piazza Venezia and in Forum of Nerva for Forum Ware, have added new important data, as have those in the Colosseum for Sparse Glazed Wares.[78]

In general, the main form is the jug, but while this is almost exclusive to Sparse Glazed Ware production, Forum Ware is instead characterised by greater variety. In fact, Forum Ware is typically characterised by several forms, such as cups/lamps (for there is no certainty about the actual function of these forms), glasses, basins, cooking pots, lids/lamps (see below), and jugs. Furthermore, some vessels, which have been found in *Crypta Balbi* and dated to the late eighth century, are not identified as part of Forum Ware production, since, despite some similarities in clays, the glaze covers only the interior part of the forms. As for the main forms,

[77] Otto Mazzucato published a useful table (now rather out of date) of the possible decorations of the Forum ware in Mazzucato, *Tipologie e tecniche*, p. 136.
[78] See note 74.

cooking pots, chafing dishes and jugs have been recognised, but all have different shapes than the analogue forms in the "typical" Forum Ware. For example, some have a ring base, which is unusual for Forum Ware productions. Moreover, the evidence of burnt surfaces suggests that some were used for cooking, whereas Forum Ware production is mainly tableware.[79] However, this particular group of Forum Ware, which the *Crypta Balbi* specialist considered as a pre-Forum Ware production, is more likely to be part of the same class, as suggested by recent excavations, including Piazza Venezia. In truth, our knowledge of the earliest production of Forum Ware is still limited to a few in-phase contexts, but the cups/lamps and some lids (known as *a incastro* - shaped to fit the vessel they were made for) appear to be related to Byzantine productions (discussed below). As for glasses and basins, they are typical of the tenth century production of Rome, as well as some lids, which were produced from the eleventh century, but whose function has not been clearly identified. Such a form was not produced after the second half of the twelfth century, when the lids were exclusively made of coarse fabric.

Nevertheless, the jug is the most common form for the glazed productions, and it is the only form for which it is possible to follow all the changes, which are very clear. For example, while the first jugs are characterised by a high neck and long spout, often covered with holes, from the tenth century the necks become shorter and have a truncated conical shape, while the spouts become wider and pinched. This progressive transformation ends up with types characterised by a neck that is no longer recognisable, as it is totally absorbed by the shoulder of the jug itself. This latter type of jug is typical of the eleventh century and is always decorated with a reduced quantity of glaze. Finally, during the twelfth century, jugs are characterised by extremely scarce splashes of glaze, mostly concentrated on the wider diameter of the body, while the neck of the jug is separated again, the spouts are extremely wide

[79] See *Crypta Balbi 5*, pp. 325-328.

and the shape is generally biconical. As will be discussed regarding Common Ware (Section 2.4), this type was produced also without any glaze, showing some connections between the potters who produced them.

The data analysed above come from the main collection of *Crypta Balbi*, but other excavations have mostly confirmed them. For example, analogous changes of types have been recognised at S. Cornelia, where the archaeological deposits were dated to three main periods starting from not later than 774-6.[80] In particular, the layers dated to the third period, which most likely started between 1026 and 1035, have mostly returned Sparse Glazed wares, thus clearly marking the passage from the Forum Ware production to the Sparse Glazed ware production. The kinds of features of the vessels totally correspond to what has been analysed in *Crypta Balbi* as well, despite the sherds found at S. Cornelia being fewer, here they are in-phase.

Another important reference for those first medieval productions of Rome is the site of S. Sisto Vecchio, where the medieval layers have been dated between the end of the eighth century and the start of the thirteenth century. The data from this excavation are crucial, especially because of the technical and chemical analyses undertaken.[81] Such analyses have confirmed that Forum Ware and Sparse Glazed Ware are part of the *same* ceramic tradition, and even their fabrics share some important features, despite being different in some aspects. For example, Sparse Glazed fabrics are characterised by heavier clays, thus explaining the progressive decrease in the size of the jugs, which otherwise would have been too heavy. Furthermore, it has been demonstrated that the same fabrics are impermeable, meaning that the glazed surfaces had a new aesthetic and decorative function.

[80] See note 58.
[81] See note 2.

At S. Sisto Vecchio, those technical changes have been related to the equivalent changes that involved the market for pottery and the request for these kinds of products. In fact, all changes were analysed together, with the main focus being of connecting pottery production and society. Each change was compared to the other, in order to analyse possible analogies of such transformations. As expected, changes in forms and glazes correspond to changes of in clays and quantities, thus indicating an articulated and involving production system, which went from being made in individual workshops to becoming a workshop industry.[82] Of particular interest is the attempt to relate the standardisation of the later Sparse Glazed production to a different level of demand for jug type. Finally, with regard to excavations in Piazza Venezia, part of its importance is related to its precise chronology, as the site was abandoned after a violent earthquake in the mid-ninth century. As a consequence, the ceramics are chronologically well dated, and some of the forms found there clearly confirm the connections between the first Forum Ware production and a "Byzantine gusto".[83] In fact, this is confirmed by the presence both of jugs like those described above and of the so-called chafing dish (Fig. 7), which is a form typical of the Byzantine culture. It is common in the areas of Byzantine influence, specifically, in Rome and nearby surroundings and is dated to c. 780-830/850, however, few examples have been found so far.

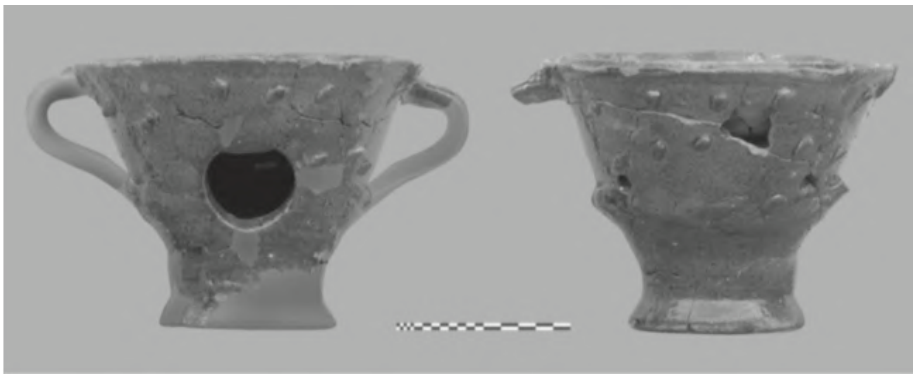

Figure 7: Chafing dish from Piazza Venezia. (Source: Serlorenzi-De Luca 2013, Fig. 18, p. 518)

[82] See Peacock, *Pottery in the Roman World.*
[83] See note 74.

However, its form was not common. In general, it is described as a kind of small-truncated conical shape portable "oven", enabling food to be kept warm. It featured an aperture in the body of the vessel to allow embers to be placed inside while the food was in the upper part of it. The glazed surface covers the whole pot, and often the form is decorated with irregular petals.[84]

In summary, Forum Ware and Sparse Glazed Ware were clearly part of the same class and it is possible to analyse changes in these between the late eighth century and the end of the twelfth. In general, the main change lies in the variety of forms produced, with the progressive reduction of the forms from the eleventh century onwards, becoming almost exclusively on jugs. At the same time, such a decrease does not correspond to an increase of other ceramic forms, of any class, which is an important feature to consider for wider economic analysis (see Chapter 7 and Conclusion). Finally, regarding the origin of Forum Ware, while a continuity from glazed ceramics of the classical period is in doubt due to lack of evidence, connections with the Byzantine sphere are more evident. Despite the chemical analysis of the clays demonstrating that the glazed wares were produced in Rome and its surroundings, both forms (chafing dishes) and decorations (petals) have clear similarities with Byzantine productions. Such connections progressively disappeared from the eleventh century onwards, when the progressive standardisation of the production began.

2.3 - Roman Tin-glazed Productions and Archaic Majolica

Late medieval ceramic production in Rome has been a matter of debate since the innovative studies of Otto Mazzucato and David Whitehouse in the 1970s, who both sought to relate them to contemporary products circulating in Italy between the late

[84] Mazzucato also wrote about this form in Mazzucato, *Tipologie e tecniche*, pp. 127-130.

eleventh and the thirteenth century and to date them.[85] In particular, they noted that while the technique for glazing and decorations of those "new" classes were potentially imported from North African and Sicilian ceramics, the forms themselves were local, such as in Rome the ring base was never used. In addition, despite the similarities within other contemporary productions, local tradition remained the main reference for the late medieval productions as well, mostly imitating some forms that were typical of the Roman *ateliers*.

As mentioned, the technique of the late medieval fine wares is different. During the late twelfth century the tin-glazed ceramics, a technique of Islamic origins (*ceramiche smaltate*), progressively replaced the other kinds of single-fired glazed ceramics and by the end of the fourteenth century they became the main fine ware circulating in Rome. These kinds of ceramics are characterised by the presence of a white surface, on which, once fired, one could draw various decorative motifs. The vessels were double-fired, as the cladding was used only after the first firing. In particular, the latter was obtained by adding a small percentage of tin oxide to the lead glaze in order to have an opaque white finish, which was then decorated. As noted, such kind of ceramics were diffused across Italy, but each area developed its own tradition, based on both the motifs and the forms produced.

In general, these ceramics have been defined by the scholars as "proto-majolica", in order to differentiate them from the later, well known, productions of majolica.[86] Each area had its own proto-majolica productions and most likely these topographic differences are what really distinguish proto-majolica from majolica, which by contrast was more standardised. Thus, despite the word "proto-majolica" being used

[85] In particular, see notes 48 and 58, and O. Mazzucato, *La ceramica laziale nell'Altomedievo*, (Rome, 1977).
[86] See Whitehouse, notes 48 and 58. At a recent conference (unpublished), Marco Ricci and Jacopo Russo tried to identify the main types of decorations.

in the title, from now on I will directly refer to the specific productions of Rome, instead of using a generic word that includes many different classes of ceramics.

In particular, like for Forum Ware and Sparse Glazed Ware, the assemblage excavated in *Crypta Balbi* forms what still now is the most important collection of such late medieval productions.[87] As explained earlier (Section 1.4.2), that excavation provided reliable stratigraphic data and consequently reliable chronological data of the main ceramics classes. This reignited the debate about the late medieval productions of Rome. In fact, despite the production clearly sharing aspects with contemporary productions typical of Southern Italy, it is still difficult to define how they relate to each other. Moreover, the tin-glazed ceramics include different classes, which are characterised by different forms and diffusion. For this reason this section has a generic title, as it includes various productions that need to be explained more in detail.

The very first different class that started to circulate in Rome from the late twelfth century onwards is the *Ceramica o Maiolica laziale* (Latium Ware), which indicates a poorly defined group of ceramics. Although this group was identified in the 1970s as a separate production typical of Rome, given its own forms and decorations, it includes different techniques.[88] In fact, the word "majolica" indicates a precise kind of coating technique, while the ceramics circulating in Rome between the late twelfth and the late thirteenth century are characterised by several coating techniques. The most common variant, normally identified as Latium Ware, has some tin-glazed surfaces and also some lead-glazed surfaces. As mentioned, the use of tin oxides creates white surfaces for decorations, generally in brown, green and yellow, obtained with the use of metal pigments. The decorations at this stage are simple,

[87] See A. Molinari, 'Le ceramiche rivestite bassomedievali', in *Crypta Balbi 5*, pp. 357-484.
[88] The most consistent group analysed for Rome is that published in *Crypta Balbi 3* and *Crypta Balbi 5*. See Whitehouse, 'Medieval glazed pottery'.

including plants and geometric motifs.[89] There is also the so-called Green-Glazed Ware (*ceramica invetriata verde*), which is a group of ceramics characterised by a bright green finish, from apple green to emerald. Normally, there is no decoration at all, the cladding is very thick, as this was most likely obtained by a mixture of tin-oxides and lead covering the whole vessel. In general, both types are not as common as the productions of the previous centuries and they do not appear as extensively used. In general, Green-Glazed wares are rarer than Latium wares.[90] However, we must bear in mind that the data available for those productions are scarce and there are only a few sites that have returned these kinds of ceramics, such as some deposits inside the Colosseum, the Mausoleo di S. Elena and the *Crypta Balbi*.[91]

Regarding the main forms, both productions are characterised by the prevalence of closed, while there are few open forms. Latium ware's typical form is the jug/mug, with high-truncated conical neck, ovoid or biconical shape and a pinched spout that has been defined as *a mandorla* (almond shaped). In particular, the latter is typical of the jugs of this period and as it resembles the spouts of the latest productions of Sparse Glazed Ware, this was presented as a proof of uninterrupted local tradition of ceramics in Rome.[92] As mentioned, Green-glazed wares share many features with Latium Ware and unsurprisingly by consequence the main form of this group, the jug, has the same shape of the one analysed for Latium Ware. By contrast, while the latter has the typical green cladding, Latium Ware jugs are always decorated. Specifically, on the jugs, the decorations are only on the neck and on the main body of the vessels, mainly representing plants and geometric motifs.

[89] See Molinari, 'Le ceramiche rivestite', pp. 398-425.
[90] Ibid., pp. 389-398.
[91] See note 55; then, see M. Ricci, 'I reperti archeologici del sottoscala XXXVI', in R. Rea (ed.), *Rota Colisei. La valle del Colosseo attraverso i secoli*, (Milan, 2002), pp.344-403, and M. Ricci, 'I materiali ceramici medievali dal pozzo', in L. Venditelli (ed.), *Il Mausoleo di S. Elena: gli scavi*, (Milan, 2011), pp. 257-269.
[92] See Ricci, 'I reperti del sottoscala'.

However, at present the scarcity of these kind of vessels does not allow us to create a systematic catalogue of the decorations typical of this production. Finally, regarding the open forms, from the half of the thirteenth century the so-called "carinated" bowl with two handles began to be produced, which became one of the typical forms of the Roman repertoire of that period. Such a bowl type has been found both as Latium Ware and as Green-Glazed Ware, thus confirming the close connections between those productions. As mentioned, despite the use of an innovative mixture of techniques, whose origin is still an issue, the Roman potters of the late twelfth and thirteenth century remained quite conservative in forms, as demonstrated by the visible connections between the last Sparse Glazed products and those new late medieval productions. Moreover, the type of jug that has been described above is typical of Rome, being rarely found outside Rome itself.

It is crucial to mention that while the limited fine wares circulating in Rome between c.1180 to c.1250 were clearly of few forms, mostly jugs, in the same period the phenomenon of imported wares was at its peak, since there were very few imports before then. Most of those imported wares were large decorated basins and open forms, thus all form types not locally produced before the mid thirteenth century. In addition, most of the imported wares of that period came from the South, especially from Campania, due to its proximity.[93] From the second half of the thirteenth century, when open vessels were also locally produced, the need to import these forms from close by decreased. Importing vessels became, as before the peak, related to special vessels, particularly luxurious and precious.

[93] The best repertoire of imported vessels is analysed in Molinari, 'Le ceramiche rivestite', pp. 357-389. See also J. Russo, 'I romani e il gusto esotico. Il fenomeno delle importazioni ceramiche a Roma', in *Ceramica e architettura. Atti del XLVI Convegno Internazionale della Ceramica (Savona, 24-25 maggio 2013*)', (Albenga, 2014), pp. 127-136.

As noted, Latium Ware and Green Glazed Ware can be considered as part of the same production, generally dated between the start of the thirteenth century and the half of the fourteenth. In fact, from c. 1250 Archaic Majolica was produced and circulated in Rome. This new production differs in several features, such as decoration and better quality of both tin and lead-glaze. In particular, the latter always covers the base of vessels, while often Latium Ware is left unglazed. Moreover, while Latium Ware is characterised by fewer forms, or, at least, fewer variants, Archaic Majolica has many variants for each form and its last production is characterised by more open vessels, something very unusual before then.[94]

Despite this, the main forms are again the jug/mug and the carinated bowl, but it should be considered that the quantity of the first production of Archaic Majolica is still scarce. For example, from the assemblage of *Crypta Balbi* the deposits of this period returned less than 3% of this class, while Latium Ware dominates.[95] Nevertheless, while production of Latium Ware progressively starts to decline, in contrast the production of Archaic majolica rapidly increases, reaching 60% in the deposits of *Crypta Balbi* dated to the second half of the fourteenth century and became the main fine ware circulating in Rome until the arrival of Renaissance majolica in the fifteenth century.

Since the first studies of this class there have been attempts to identify its origin, as its features were immediately recognised by scholars as clearly different from the other late medieval productions. Consequently, the changes in Archaic Majolica have been divided into different phases, mainly dependent on decoration: [96]

[94] See M. Ricci, 'Le maioliche arcaiche', in Ricci-Vendittelli, *Crypta Balbi, ceramiche medievali e moderne*, 1, pp. 102-176.
[95] See Molinari, 'Le ceramiche rivestite', pp. 468-479.
[96] See Whitehouse, 'Medieval glazed pottery'.

- first phase (thirteenth century) is characterised by the presence of both forms and decorations still typical of Latium Ware;
- fourteenth century, influence comes from the area of Orvieto (see below);
- final phase (first half of the fifteenth century) is characterised by types of form that hint towards the main types of Renaissance majolica.

The *Crypta Balbi* excavations have confirmed such divisions clearly. I do not aim to offer a detailed study of the decoration, but instead to stress the elements of change. Archaic Majolica represents indeed a cultural change, rather than a simple change of either techniques or decorations. In fact, while most of the classes produced before Archaic Majolica were influenced by the ceramics tradition typical of Byzantium, and, later, Southern Italy, as regards forms, coatings and decorations, for the Archaic majolica the main area of influence is identified in Tuscany, most likely centred on the city of Pisa (see discussion in Conclusions).

The jug can be considered the main form of all the medieval Roman fine-ceramic productions (Fig. 8), while it is likely that other forms, such as plates, must have been in wood or metal.

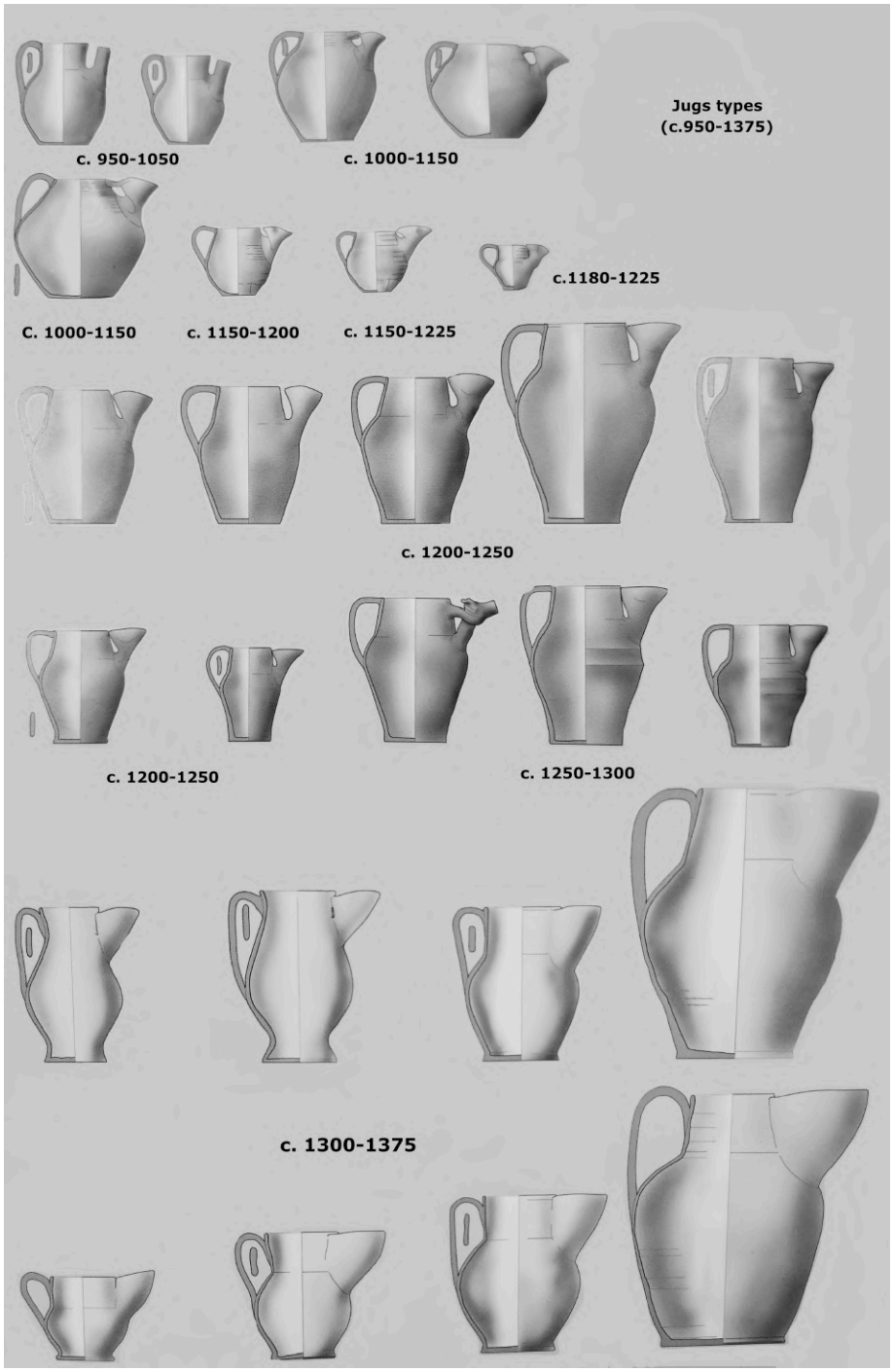

Figure 8: Changes in jugs types between c. 950-1375. The image shows only the jugs related to the period analysed in this thesis, and was created from three different published pictures lacking scale; thus, for the dimension of each jug, see the descriptions published in Ricci Vendittelli 2010, pp. 31-37, 47-65, and 102-177. (Source: for original images, Ricci Vendittelli 2010, pp. 30, 46 and 101; editing by L. Campagna)

The large variety of medieval jugs found let us analyse changes of this form over time, as well as the fixed features maintained from one class to the other. For example, the typical jugs of Archaic Majolica were the first examples and still have

the same features as the jugs described for Latium Ware, such as the *a mandorla* spout. Nevertheless, the typical Archaic Majolica jug is characterised by a different kind of spout, which has been defined *a pellicano* (a wide spout entirely attached to the body of the vessel, similar to a pelican's beak). Surely, this is the most representative type of this form and was common in Rome and its surroundings. From this first type the jugs/mugs evolve into different variants, such as jugs with a flared basement, or jugs with tri-pinched spouts.[97] While the former is typical of the first production of Archaic Majolica, despite not being typical of Rome itself, the latter is an innovation that was introduced in the second half of the fourteenth century, most likely under influence from northern Lazio and Orvieto (Umbria).[98] In relation to the other main form of Archaic Majolica, the carinated bowl, this comes from the Latium Ware tradition. In fact, most of the types that have been recognised have similarities with Latium Ware types, from which the main differences are the quality of the coatings and decorations (Fig. 9). Nonetheless, the repertoire increases via a huge variety of soup dishes, basins and cups. In particular, both the soup dishes and the basins have some previous Latium Ware examples, but they are fewer and simpler than the Archaic Majolica examples. Therefore, like the cups, this form is totally new in the Roman repertoire.

[97] See Ricci, 'Le maioliche arcaiche'.
[98] See Molinari, 'Le ceramiche rivestite'.

Figure 9: Archaic Majolica jug from *Crypta Balbi*, lower diam. cm 7.3, max diam. cm 11.6, h. cm 17.5. (Source: Ricci-Vendittelli 2010, Fig. II.1.1, p. 104)

Brief comment is needed on decorative changes since they show the extent of the cultural changes that happened between the thirteenth and the fourteenth century. While the motifs typical of Latium Ware are quite simple, Archaic Majolica is characterised by more complex decorations, including anthropomorphic, heraldic and zoomorphic motifs. In addition, from the second half of the fourteenth century, cobalt blue starts to be widely used for decorating, becoming the main colour of Renaissance productions.[99]

In summary, the late medieval fine wares circulating in Rome can be divided into different productions. The first includes Latium Ware and Green Glazed Ware, which can be considered a by-product of the former. These ceramics still have deep connections with previous local productions, maintaining many characteristics, such as the majority of the close forms and the shape of the main forms. The glazing

[99] See M. Ricci, 'Le maioliche rinascimentali', in Ricci-Vendittelli, *Crypta Balbi, ceramiche medievali e moderne*, 1, pp. 178-268.

techniques and decorations, however, are very different and the introduction of both tin oxides and coatings is an innovation that totally changes the production. In fact, improvement in both the claddings and the decoration, together with the cultural influence of Umbrian and Tuscan areas, result in the introduction of a new class, the so-called Archaic Majolica, which clearly prefigures post-medieval ceramic types, especially in terms of variety of decorations and forms.

2.4 - Common Wares and Cooking Wares

"Coarse Ware" is a generic definition, which includes different utilitarian classes, which are made of coarse fabrics, mostly without any kind of coating, coarse wares include vessels used either for cooking, or storing foods, as well as some tableware. Thus, "Coarse Wares" indicates all ceramics different to fine wares for function and coating. In this sense, coarse wares can be divided into two classes, cooking and common wares. As noted, these classes are characterised by long chronologies and thus it is often not possible to precisely date an archaeological deposit from only these classes. Clearly the typological study of diagnostic parts is crucial in order to reduce these chronologies. Moreover, being classes that are distinctly utilitarian, changes can be much less visible than, for example, changes in claddings and decorations cited for fine wares.

The common wares that were used as either tableware or for storing food datable before the ninth century are extremely rare, if the deposits in *Crypta Balbi*, dated to the seventh century are excluded.[100] The analysis of this is crucial in order to study the changes that affected common wares, since from the seventh century onwards trades around the Mediterranean Sea decreased, while at the same time local

[100] L. Saguì, 'Il deposito della *Crypta Balbi*: una testimonianza imprevedibile sulla Roma del VII secolo,' and M. Ricci, 'La ceramica comune dal contesto di VII secolo della *Crypta Balbi*' in L. Saguì (ed.), *Ceramica comune in Italia: VI-VII secolo. Atti del Convegno in onore di John W. Hayes, Roma 11-13 maggio 1995*, (Florence, 1998), pp. 305-330 and 351-382.

productions increase, keeping some similarities with the productions typical of the previous centuries, such as the majority of closed forms and the general wider variety of forms (mainly jugs, amphorae, lamps, and cups).[101] By contrast, from the ninth century onwards, the repertoire of forms started to decrease and the production was mainly based on amphorae mostly used for storing food rather than long-distance transport. Nevertheless, ninth century common ceramics are recognisable because, generally, vessels were made whiter on the outside, with combed decorations of parallel and/or wavy lines. While such kinds of decorations totally disappear after the eleventh century, the whitened surfaces are typical of the ninth century. [102]

Further, from the eleventh to the late twelfth century, almost 90% of the production comprise amphorae, the main type characterised by ribbon-shape handles, becoming larger at their highest point, from the second half of the eleventh century (Fig. 4, p. 34). As for the shape of those amphorae, their body progressively changes from a globular shape to a biconical one, which is typical of the end of the twelfth century.[103] Some utilitarian forms, which were complementary to the amphorae themselves, such as lids and bases that helped the amphorae to stand up, integrated this almost exclusive production of amphorae. While the former are characterised by upside-down truncated cone shapes, the former are simple and undecorated before the fourteenth century. The types of all these forms remain quite constant until the fifteenth century, when production appears to rapidly decline.

At the same time, from the end of the twelfth century, other forms are produced again, such as bowls, jugs and small amphorae. The bowls are likely to be the

[101] See M. Ricci, 'Ceramiche da mensa acrome', in Ricci-Vendittelli, *Crypta Balbi, ceramiche medievali e moderne*, 1, pp. 39-41.
[102] See L. Paroli, 'Reperti residui di età medievale', in *Crypta Balbi 3*, pp. 173-244.
[103] Ibid.

antecedents of the late medieval glazed bowls that have been analysed above.[104] Despite this, at this stage their production is not as sizeable as the glazed production of the late thirteenth and fourteenth century. For the jugs, one must mention a specific production, typical of the late twelfth century up to the mid-thirteenth century, that includes some jugs with the same fabrics of the contemporary amphorae and the shape of the latest production of Sparse Glazed Ware, characterised by a squat biconical body, with a broad tapering neck and a pinched spout, which may be attached to the rim by a bridge (Fig. 10).

Figure 10: Comparison between latest Sparse Glazed jug (on the left), and Common ware jug (on the right), dated to ca. 1180-1200. (Source: Rea 2002, Fig. 32, p. 370)

This specific production is significant, because it demonstrates the continuity of the shapes produced in Rome, as well as the presence of *ateliers* of potters producing both amphorae and jugs.[105] Moreover, since jugs are chronologically well defined, their value as dating elements is crucial. Finally, as seen regarding the fine wares, from the fourteenth century the variety of forms increases again and forms such as

[104] See M. Ricci, 'Ceramica acroma depurata 2. Brocche, catini, orcioli e alter forme minori', in *Crypta Balbi 5*, d, pp. 288-307.
[105] See Ricci, 'I reperti archeologici del sottoscala', pp. 355-358

big jugs, basins and *orcioli* (large vessels for food storage, sharing some features with globular amphorae of the same period) become progressively more common.

In summary, the medieval common wares of Rome are characterised by the presence of few almost fixed forms and types, which were mainly used for storing food. In particular, some share the same shapes as other classes, such as jugs with the same type of latest production of Sparse Glazed Ware. Nevertheless, amphorae were certainly the main form circulating in Rome between the ninth and fourteenth century, when other forms were re-added to the repertoire. Such an increase corresponds to similar changes to fine wares.

Finally, as for the cooking wares, we have mentioned the issues related to their analysis, which are the same as for common wares, such as scarcity of reliable stratigraphic data. Nevertheless, it has been possible to study the fabrics of some cooking wares circulating in Rome between the eleventh and fifteenth century (mainly from *Crypta Balbi* and S. Cornelia), which shows that fabric type remained unchanged during that period. Furthermore, this fabric is easily recognisable because of its particular texture.[106] This clearly points to stability in the production of cooking wares, which is confirmed by forms typical of that period, characterised by few changes, suggesting a more conservative production for such utilitarian classes. Despite this scarcity of reliable medieval assemblages, we can analyse the main features of this class. Firstly, before the twelfth century, the forms produced are few, as there were only cooking pots, *testi* (bread cooker, Fig. 11), and the so-called 'frying pans/*testi*' (as it is not possible to clearly distinguish their function). When it comes to the 'pans/*testi* 'and the *testi*, it must be said that the uncertainty about the form is related to lack of data, as such sherds are not always recognisable and pans and *testi* share similar features. In fact, pans were first produced between the ninth century

[106] See Ricci, 'Ceramica acroma da fuoco', in *Crypta Balbi 5*, b, pp. 215-249.

and the first half of the eleventh, and they were used for frying foods. They are characterised by a truncated cone shape with a cave handle for inserting a wooden grip.[107] The shape resembles the shape of the *testi*, as the only difference is the handle that is on the top for the *testi*.[108] As a consequence, the rims of these forms are extremely similar and they are difficult to distinguish between.

Figure 11: *Testo da pane* from *Crypta Balbi*, max diam. cm 24, h. cm 11. (Source: Ricci-Vendittelli 2010, Fig. I.7.16, p. 104)

Nevertheless, while the pans ceased to be produced between the first half of the eleventh century and the fourteenth, *testi* were continuously produced until the end of the twelfth century. Moreover, this form has been found in various sites across Italy, indicating some wider common food habits. In effect, these cooking pots were the main form of cooking ware produced during the Middle Ages and were produced almost uninterruptedly since the Roman period, being used for cooking liquid foods, such as soups and stews.[109] Being so common, it is possible to find

[107] Ibid.

[108] Ibid.

[109] See Ricci, 'Appunti per una storia della produzione'.

cooking pots of very different sizes, but always with some fixed features, such as the two handles that are typical of the cooking pots produced in the area of Rome and the globular shape of the body.[110] In contrast, the rims change, prior to the tenth century they were wide, whereas between the eleventh and fourteenth century the rims were generally short and undistinguished from the necks. From the end of the twelfth century, while production of *testi* started to decrease, new forms were added, such as small cooking pots, lamps, and lids. The small cooking pots were miniaturised variants of the cooking pots that have been analysed above and are typical of the thirteenth century. The main difference between these are the tri-pinched rims and the presence of one handle.

Lamps are also typical of the late twelfth century, as before then they were either in common ware or in sparse glazed ware. They are characterised by an open shape, tri-pinched rim and a small handle. Their open shape is typical of the medieval production and so are easily recognisable from examples dated to the fifth and sixth centuries.[111] Finally, lids also start to be produced again from the late twelfth century, after their production was interrupted in the tenth century. While earlier examples are characterised by a truncated cone shape with a handle on top, late medieval production is characterised by an upside-down truncated cone shape, with a handle at the centre, closely similar to their common ware equivalents. Such a type was very practical, as it was possible to use it together with cooking pots of different sizes. They are very typical of medieval Rome and it surroundings.

In conclusion, cooking wares developed much like common wares. In fact, before the late twelfth century, the forms produced are few and even the changes of the types are really limited. In contrast to fine wares, which can be analysed in terms of trades

[110] See Ricci, 'Ceramica acroma da fuoco', b, pp. 224-233.
[111] See Ricci, 'Ceramica acroma da fuoco', b, pp. 239-240.

and diffusion of the classes outside their place of production, the cooking wares are local products that can reveal the food habits.[112] For example, the re-appearance of frying pans in the fourteenth century is an important index of the change of cooking habits, as this method was not used during between c. 800 and 1300. Meanwhile, the disappearance of *testi* by the half of the thirteenth century indicates a different way to make bread. In addition, even the absence of some utilitarian forms among the ones analysed above is important, as it indicates that tableware were completed by unpreserved forms, most likely as they were made of perishable materials, such as wood.[113] As will be analysed in more detail in the final chapter, all these changes can be related to major economic transformations within Rome over this long period.

2.5 - The Glazed Cooking Ware

The last class to be described is Glazed Cooking Ware, which was a technical improvement of the unglazed cooking wares, hence its discussion among the coarse wares. This class is significant as it forms part of the innovations involving ceramic production between the thirteenth and fourteenth century, such as the introduction of tin-glazed ceramics, and the partly new repertoire of forms. This class is characterised by very thin vessels with lead-glazed surfaces only in the interior and on the rims (Figs. 12, 13, and 14). As for the colour, the coatings are orange to greenish. Apart from the forms that have been analysed above (cooking pots, frying pans and lamps), this class has some new forms, such as saucepans and mugs (*boccali*).[114] The latter has two handles and biconical shape and most likely was largely used for cooking non-liquid foods. As for the "mugs", they are high vessels with a single handle, likely used for warming liquids, such as wine and/or infusions.

[112] See Chapter 7.
[113] S. Gelichi, *Introduzione all'archeologia medievale. Storia e ricerca in Italia,* (Rome, 1997), pp.235-240.
[114] See M. Ricci, 'Ceramica invetriata da fuoco', in *Crypta Balbi 5*, c, pp. 250-263.

Figure 12: Glazed cooking pot from *Crypta Balbi*; upper diam. cm 12.2 max diam. cm 15, lower diam. cm 9.6, h. cm 13.3. (Source Ricci Vendittelli 2010, Fig. II.5.12, p. 294)

Figure 13: Glazed cooking pot from *Crypta Balbi*; upper diam. cm 7.5, max diam. cm 10.5, lower diam. cm 6.6, h. cm 9.4. (Source: Ricci Vendittelli 2010, Fig. II.5.13, p. 294)

Figure 14: Frying pan from *Crypta Balbi*; lower diam. cm 20.6, max diam. cm 25, h. cm 9.5. (Source: Ricci-Vendittelli 2010, Fig. II.5.18, p. 295)

The introduction of this new class is disputed, as it is not a well-known class due to the scarcity of comparisons, both in Rome and in Italy. Nevertheless, it is important to bear in mind the introduction of this class during the same period that was characterised by several ceramic innovations, as will be analysed in comparison with the city's wider economic system in Chapter 7.

In conclusion, despite the overall analysis of medieval ceramic production in Rome still being patchy, a wide overview of the changes that occurred between the tenth and the fourteenth century is feasible. Indeed, there are some key moments of change. At the end of the eighth century lead-glazed production and Forum Ware were introduced to Rome; from the start of the twelfth century the standardisation of classes and forms is strongly evident. Finally, the early thirteenth and fourteenth centuries represent a massive transformation of both classes, forms, and especially the cultural influence underlying such changes. At the same time, we must consider that while the fine wares are better studied, given their importance as chronological

indicators, the study of common ceramics is problematic, especially because they are characterised by long periods of use and where fine wares are not present in the same context it can be impossible to date more everyday pottery. Yet these common classes are probably more significant than the fine ones for defining everyday food-processing habits. Nevertheless, as this thesis aims to demonstrate, it is possible to work on several sites in order to obtain more detailed information that goes beyond the simple typological and chronological data. Such data are of little value if not constantly compared to as other sources as they come to light, especially when related to wider economic analyses. In particular, my focus is on the quantification of ceramics, whose potential can contribute to a strong and coherent economic reconstruction of medieval Rome as a whole.

Class	Chronology	Main Forms
Forum Ware	c. 800-1000	**Chafing dishes, jugs**
Sparse Glazed Ware	c. 1000-1200	**Jugs**
Latium Ware	c. 1200-1350	
Green Glazed Ware	c. 1200-1350	
Imported Wares	c. 1150-1300	**Basins and open vessels**
Common Ware (*Acroma*)	c. 650-1800	**Amphorae, lids, pots**
Cooking Ware	c. 500-1400	**Cooking pots, *testi*, lids**
Glazed Cooking Ware	c. 1300-1900	**Cooking pots, lids, pans, *casseruole***
Archaic Majolica	c. 1300-1450	**Jugs, bowls, soup dishes**

Table 1: Chronologies and main forms of the classes analysed in this thesis.

Late Antiquity	c. 300-699
Early Middle Ages	c. 700-999
Central Middle Ages	c. 1000-1300
Late Middle Ages	c. 1300-1399

Table 2: Chronological frame.

Chapter 3
Methods of Analysis

3.1 - Quantitative Analysis: Different Methods

The debate about which are the most appropriate methods for quantifying ceramics is vital and its importance is evident when interrogating large samples. In Chapter 2 we have seen that one of the most recent works about quantification was published in 2016 by Monica Ceci and Riccardo Santangeli Valenzani, prior to which work by Clive Orton *et al.*, seeking to explain and compare the available quantification methods, outlining both advantages and disadvantages of their use. [115] Among the various methods that are analysed in those works, here we will focus on those that can be used on large assemblages, while more specific methods that are suitable will not be explained here.[116]

The most common and straightforward method is counting sherds. Unfortunately, this method is affected by the different levels of fragmentation that can influence both classes and types. Evidently the most fragile classes are most likely to be broken into more fragments than the more resistant ones, thus affecting the overall proportion of the types as well.[117] As a consequence, Orton *et al.* defines this method as *statistically biased*, meaning that sherd counting is unreliable for describing a pottery assemblage.[118]

[115] See Ceci-Santangeli, *La ceramica nello scavo archeologico*, and Orton, *Pottery in Archaeology*.
[116] In fact, some calculations are far too complex for being used on large assemblages. In particular, see Ceci-Santangeli, *La ceramica nello scavo archeologico*, pp. 20-39.
[117] Ibid.
[118] See Orton et al., *Pottery in Archaeology*, pp. 203-218.

But weight-measurement of sherds is equally affected by the features of specific classes, as some classes are heavier than others. For example, amphorae are certainly the heaviest ceramics class, and thus using only the weight-measurement for assemblages characterised by high percentages of residual amphorae is undeniably biased.[119] Despite that, weight is arguably reliable in order to compare proportions between different assemblages, as the bias of heavier classes do not change from one assemblage to another, differently from sherd counting, in which proportions are not unbiased, because it is impossible to measure fragility and potential fragmentation of classes. By contrast, even weight cannot be used for measuring proportions within classes of the same assemblage. The presence of much heavier classes affects the results, as we will see regarding *Cuneo X*. However, both methods combined give a better overview of a ceramics assemblage, but being based on different values, their combined use does not necessarily reduce any bias, and may increase them. Moreover, we must bear in mind that generally only one method is used and it is not common to have several methods in tandem. In fact, I would argue that it is necessary to use at least two different methods for a reliable estimation of an assemblage in order to use ceramics data for broader analyses. In conclusion, we must consider other methods than sherd counting and weight measurement if we want to fulfil that. Here we will briefly discuss number of vessels represented and EVE (evaluated vessel equivalent).

Both the number of vessels represented and EVE are two quantification methods based on the evaluation of the original number of vessels rather than on the measurement of their quantity based either on the number of sherds, or on their weights. As for numbers of vessel represented, there are different kinds of estimates. The so-called *Minimum Number of Vessels*, whose aim is to identify the sherds that were part of the same vessel resulting in a number of possible estimated vessels,

[119] See quantifications of assemblages from *Vicus ad Carinas* and from the *Colosseum* (chapter 7).

however, this value arguably relies upon the competence and the skills of the person studying the assemblage. [120] As for the *Maximum Number of Vessels*, this considers each sherd as a different vessel, consequently this is clearly an overestimation, with results too generic to be sufficiently reliable. Neither of those estimates is unreliable for working on large assemblages. One method is too subjective, the other too generic.[121] By contrast, EVE is the most effective, being based on a simple proportion and not being affected by bias or personal skill.[122] In fact, EVE counts each whole vessel as 1, meaning that we have 100% of that pot. It is therefore possible to estimate how much we have of a single pot from the remaining percentage, which can be calculated depending on the measurable parts. By definition, rims and bases can be easily measured using a rim-chart that indicates their original diameter and how much of it is preserved. For example, using the rim chart we can know that we have 35% of a certain rim, the diameter of which was originally 9 cm and the same is possible for bases as well (Fig. 15).

[120] See Orton, *Pottery in Archaeology*.

[121] See Ceci-Santangeli, *La ceramica nello scavo archeologico*.

[122] Unless sherds fit together, assessing whether or not they are part of the same vessels depends exclusively on the knowledge and the ability of who is studying that assemblage, as there are not mathematical tools to use in order recognise that. By contrast, counting and weighing are more reliable, as everyone is able to count and weight (almost) without bias.

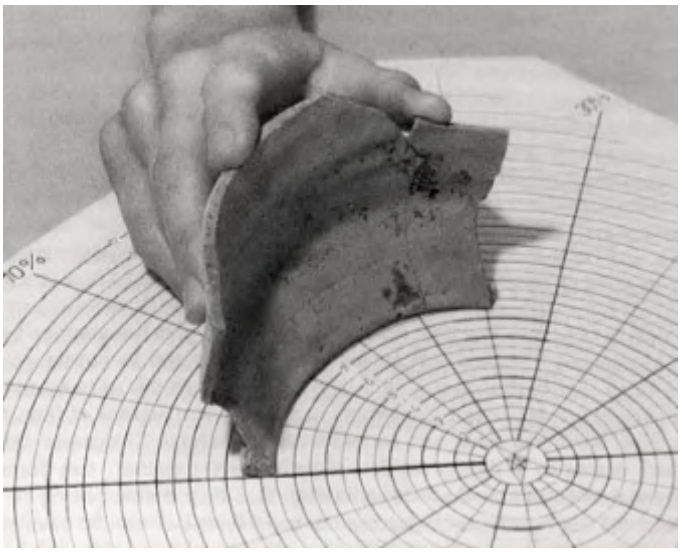

Figure 15: Rim-chart measuring of a rim. (Source Orton *et al.* 1993, Fig. 15.2, p. 211)

Handles and walls cannot be considered as measurable parts, as although measurable, they are not as regular as rims and bases and are hence more complicated to calculate as percentages. As for walls, a body sherd, their measure cannot be easily related to the vessels they were part of and consequently they cannot be used for EVE. EVE, then, counts only rims and bases and regards a complete rim/base as a proxy for a whole pot.

Thus, in order to calculate EVE we must divide the percentage of rim/base we have by 100, which is the percentage of a whole rim/base:

$$EVE = \% \text{ of measurable part} / 100$$

In general, a rim/base that has been found in an archaeological deposit will have EVE less than 1, unless it is complete. Therefore, in order to analyse large assemblages, it is necessary to sum some EVE values. For example, if some rims of a certain type of jug are complete in different percentages, such as 20%, 15% and 30%, then EVE values for these rims are 0.2, 0.1 and 0.3, meaning that we have 0.2, 0.1 and 0.3 of a whole pot. As EVE is an **estimation** of the **original** proportion of vessels of a

certain assemblage, it is clear that we need to combine similar data, otherwise results are too fragmented and the meaning of EVE would equal the maximum number of vessels. As a consequence, if we sum percentages of all the rims of the same type of jug, we obtain the EVE value for that type. For example, 0.2+0.1+0.3=0.5, the EVE of that type of jug is 0.5, meaning that the estimate for that type is 0.5 of a whole pot of that type. Generally, EVE is calculated either on types or forms, in order to analyse which was originally more represented within an assemblage. In fact, using EVE to estimate types and forms of assemblages is convenient, as it is unbiased and it is a highly efficient method to both measure proportions of an assemblage and compare different assemblages. At the same time, it must be said that EVE as well has limits. First, it takes into the account only the measurable parts and consequently the resulting estimates are partial. Moreover, such measurable parts are statistically scarcer than other parts, such as handles and walls that cannot be measured, thus they represent only a statistically minor group. This issue can be easily solved by using at least two methods, such as the sherd count and EVE, in order not to underestimate any of the classes of a given assemblage.[123]

Furthermore, the number of vessels represented and EVE let us calculate some additional values useful for site-formation analysis. The former can be used for calculating the completeness (EVE/number of vessel), while the latter for the brokenness (sherd count/EVE).[124] The completeness shows how much a certain assemblage is complete, while the brokenness indicates how much the sherds are broken and thus smaller. Given the noted issues related to the numbers of vessel represented, it is clear that calculating the completeness can be problematic. Despite it being potentially meaningful for the analysis of site-formations, it indicates the

[123] I have focused on such issues in my BA thesis, *Cuneo III – Anfiteatro Flavio: studio sulle quantificazioni del materiale ceramico di epoca medievale*, 2011-2012, Università degli Studi di Roma Tre.
[124] These calculations were first used by Orton; see *Pottery in Archaeology*. Brokenness and completeness are theoretically the opposite, but there is no way for calculating both together.

entity of the post-depositional processes that affected the deposit being studied. As for the brokenness, its main limit is that it depends on the forms and types analysed, as some are clearly more breakable than others. However, bearing in mind that these methods must always be considered depending on the assemblage being studied, it would be reasonable to use brokenness as a fixed index in order to analyse specific forms and types and consequently the site-formation features of the wider context itself. In this way, we could use the brokenness as a descriptive index of an assemblage, thus knowing that some values of this index are related to specific types of deposit. In this way it is possible to work without calculating the completeness, especially when studying such assemblages for which it is undeniably impossible to calculate the number of vessel represented.

In conclusion, the preferred methods to quantify a ceramic assemblage are by weight and by EVE, given that while the weight maintains the proportions between classes of different assemblages, EVE is not affected either by completeness or by brokenness, and is more unbiased and reliable. By contrast, sherd count depends too much on the fragility of certain classes for being considered as reliable as weight and EVE. Also, since each assemblage is different, so the choice of methods can depend on which kinds of questions we want to address. For example, we will see that two of the contexts analysed in this thesis needed the sherd counts in addition to weights and EVE in order to balance the data from the weights. By contrast, the assemblage from S. Omobono has been quantified using the EVE and sherd count only, because of the different kinds of residual classes from this site. In fact, the key point is to be able to use quantification as a tool to compare data, because when compared within the wider context, we are fully able to contribute to the analysis of past use and production.[125]

[125] See *Pottery in archaeology*, 2nd edition, pp. 24-38.

3.2 – Methodological Choices

In Section 1.1, we have seen that this research is based on a large amount of sherds (more than 40,000) from three different sites in Rome. As a consequence, choosing an appropriate methodology, common for all the sites, was an important step for the whole analysis.

First of all, it must be considered that most of the medieval assemblages known for Rome have featured in several essays and publications, each having a different approach and purpose. Often the very first ceramics reports were more general accounts, and only in the latest works the attention has pointed more to statistics. Obviously, despite these newer approaches being more suitable than just the older simple reports of the main forms, which were generally limited to the best-preserved ones, it is rather difficult to put all these different data together. This is so especially when we are working on several excavations carried out over several decades. For this reason, certain common features between different assemblages must be isolated in order to gain some points of comparisons, such as the chronology, the ratio of the different classes, the greater or lesser circulation of some forms than some others. Thus one of the aims of this thesis is to create an overview of medieval Rome dependent on the ceramic information available: some unpublished assemblages excavated recently will be the starting point of a new and original analysis; when possible, those new data will be compared to published assemblages of the same period.

All the sherds have been **counted**, divided into different **classes**, **weighed** (for class) and, whenever possible, **identified as specific types** (Appendix 3), for which the main reference for the medieval ceramics of Rome is still the *Crypta Balbi*

publications.[126] However, the percentages analysed in Chapters 4, 5 and 6 are based on the number of fragments, because the weight is too unreliable within contexts with numerous residual finds. Moreover, in the case of the *Vicus ad Carinas*, given the uncertain chronology of some sherds of common ware and cooking ware, I have preferred to keep ancient and medieval finds together, distinguishing just the more diagnostic parts, such as rims, and sometimes handles and bases as well.[127] As for drawings, sherds from the assemblages of *Vicus ad Carinas* and the Colosseum are too small, and typologically known, thus I have decided not to draw them; for S. Omobono, drawings have been published by Marina Giustini. Finally, for the rims I have calculated both percentages of conservation and EVEs.

All the data obtained have been tabulated within charts, of which there are examples in the Appendix. At the same time, from the same data I have created large Excel files and used these to create the single-site graphs (Chapter 7). Whenever possible, new data obtained in this way were compared to published data of the same chronology, enriching each chronological framework. Finally, the last step was to diachronically compare the sites, permitting discovery of some common features that have been analysed in the wider economic landscape of medieval Rome (see Conclusion).

[126] See *Crypta Balbi 5*, note 55.

[127] In fact, handles and (sometimes) bases can be recognised as specific types - see Chapter 2.

Chapter 4
Rome between the Ninth and the Eleventh Century and the Case of the *Vicus ad Carinas*

4.1 – Introduction

The first site that will be analysed is the *Vicus ad Carinas*, an ancient road active since c. 60 BC, being named first by Dionysius of Halicarnassus.[128] However, before moving to it and its ceramics (Sections 4.6.1 and 4.6.2), it is important to outline the layout of the whole area, as the Vicus was related to the Fora and vice versa (Sections 4.3 and 4.4). Moreover, given that the sherds found at the Vicus are related to what was happening in the nearby areas during the same chronological frame, the medieval ceramics from the Imperial Fora will be explained as well.

4.2 – Classical Evidence

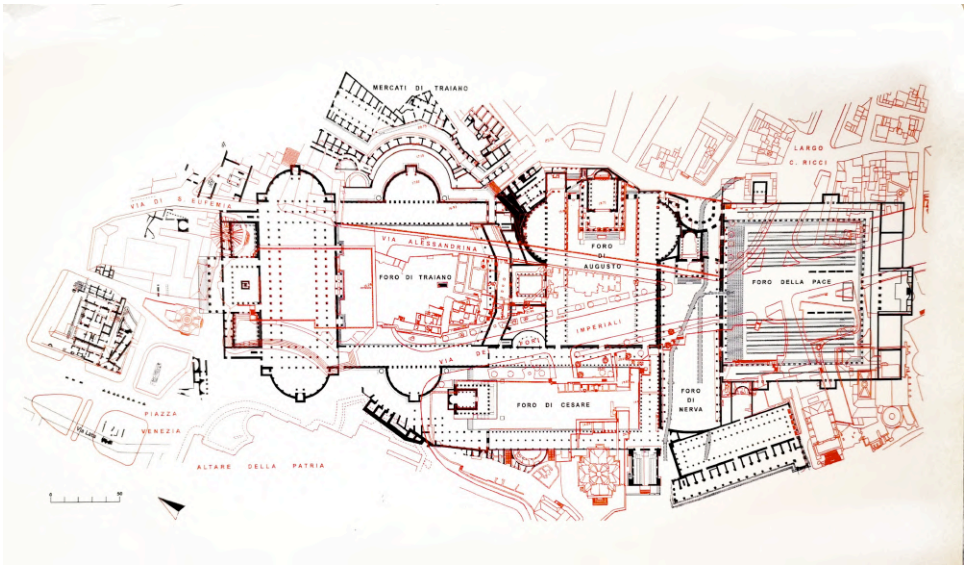

Figure 16: Plan of Imperial Fora, showing both classical evidence, and modern streets layout. (Source: Meneghini 2009, Tav. I, p. 39)

[128] See D. Palombi, *Tra Palatino ed Esquilino: Velia, Carinae, Fagutal. Storia urbana di tre quartieri di Roma antica*, (Rome, 1997), pp. 36-38 and 49-51.

This area was continuously occupied over the centuries, with the first signs of occupation dating back to the ninth century BC.[129] Before the Imperial period it is likely that this area was occupied by commercial structures and dwellings; then, from the first century AD, Roman Emperors started to build the so-called Imperial Fora (Fig. 16). Each Forum had its specific buildings and functions, which affected the different developments that they had after the end of the Roman period (Fig. 17). Here, we will briefly consider the use and the structure of the Fora before turning our full attention to their medieval phases.

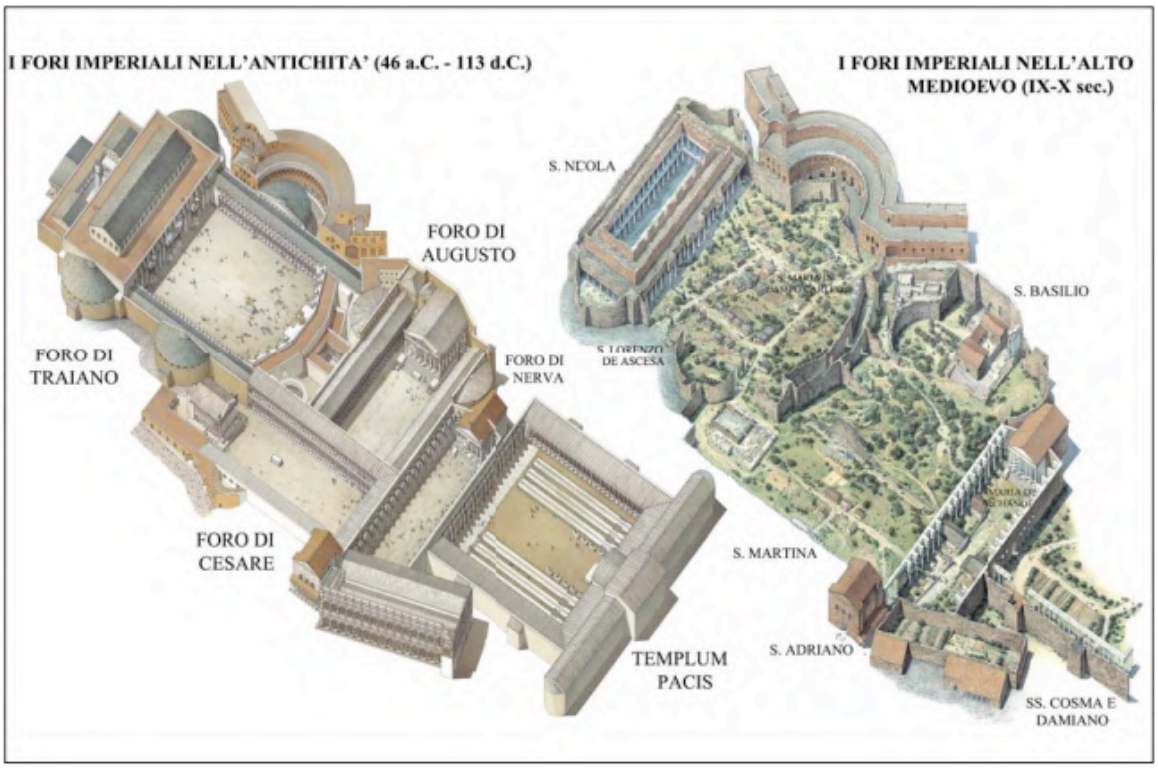

Figure 17: Imperial Fora during the Imperial period (left), and their hypothetical reconstruction during the Early Middle Ages (right). (Source: Meneghini 2017, Fig. 2, p. 13)

[129] For the general history of the area of the Imperial Fora see R. Meneghini, R. Santangeli Valenzani, *I Fori Imperiali – gli scavi del Comune di Roma (1991-2007)*, (Rome, 2007), and Meneghini-Santangeli, *Roma nell'Altomedioevo*, note 18. The latest work about the archaic phases of this area is A. Delfino, *Forum Iulium: L'area del Foro di Cesare alla luce delle campagne di scavo 2005–2008. Le fasi arcaica, repubblicana e cesariano-augustea*, (Oxford, 2014).

- The Forum of Caesar[130] was the first one built in this area (BC 54-29), and its main building was the temple dedicated to Venus *Genetrix*, on the northern side of a courtyard closed by porticoes. Almost nothing of this original layout still remains, because of several changes – i.e. the construction on the *Curia* on the southern side, connecting this Forum to the Roman Forum. However, after a great fire in AD 283, major alterations were carried out under Diocletian (AD 284-305).[131]
- The Forum of Augustus was created after the expropriation of some private dwellings, and inaugurated in AD 2.[132] It is on the eastern side of the Forum of Caesar and was mostly used for courts. There was a courtyard (70 x 50m), and a temple dedicated to Mars *Ultor* on the short, eastern side. In particular, the courtyard was closed by porticoes with *esedre* on two sides, and a wall on the side opposite to the temple. A massive wall (still visible) divided this Forum from the *Subura*. Little is know about the decoration, as most of the ancient materials were taken over the centuries to be reused.[133]

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130 For the description of Forum of Caesar see Delfino, *Forum Iulium*, note 129.

131 *Atrium Libertatis* is known since Republican age, but its original location is still matter of debate: see F. Coarelli, 'Atrium Libertatis', *LTUR*, I, 1993, pp. 133-135. For an overview of the transformations that involved Imperial Fora, see E. La Rocca, 'La nuova immagine dei Fori Imperiali', in *RM*, 108, 2001, p. 180; R. Meneghini, 'La trasformazione dello spazio architettonico del Foro di Cesare nella tarda antichità', in *Scienze dell'Antichità*, 16, 2010.

132 See R. Meneghini, 'I Fori Imperiali in età post-classica: i Fori di Augusto e di Traiano', in M. Ghilardi M., S. Baiani (eds.), *Crypta Balbi Fori Imperiali. Archeologia urbana a Roma e interventi di restauro nell'anno del grande giubileo,* (Rome, 2000), pp. 83-89; R. Meneghini, *I Fori Imperiali e i Mercati di Traiano. Storia e descrizione dei monumenti alla luce degli scavi recenti*, (Rome, 2009).

133 Fortunately, it has been possible to study the decorations of the temple from a series of reliefs that were most likely part of the so-called *Ara Pietatis Augustae*, an altar dedicated to *Pietas* by Augustus: most likely, the decorative scheme was focused on the figures of Mars and Venus, which were in the centre of the pediment and recalled both the revenge for Caesar's murder, and the mythological ancestor of the *gens Iulia* including a depiction of Augustus. The message of the articulated representational programme was clear: Augustus was presenting himself as the legitimate successor of Caesar. The complex meaning of the decorations continued inside the porticoes, where the statues of both the glorious kings of Rome, and the most important political men of Roman history decorated the semi-circles. For the *Ara Pietatis*, see E. La Rocca, Pietas Augusta, 'Ara', *LTUR*, IV, 1999, pp. 87-88. For the political message of such decorations, see P. Zanker *Il Foro di Augusto*, (Rome, 1984), and P. Zanker, *Augusto e il potere delle immagini*, (Turin, 1989).

- The *Templum Pacis* was dedicated in AD 75 by Vespasian, and built just in front of the Velia, the saddle between Palatine Hill and Oppian Hill.[134] At the end of the second century (AD 192), it was damaged by a fire and had to be restored under Septimius Severus.[135] It was made up of a square courtyard (110 x 105m), and the main building of the temple itself. Before the start of the recent archaeological excavations, little was known about its layout.[136] However, the courtyard contained a luxuriant garden, with exotic plants, fountains, and statues, and traversed by six parallel *euripi* (a sort of small canals) - three of which have been excavated.[137] As seen from the recent excavations (1998-2000), everything was decorated[138], and in a room next to the temple there was displayed the *Forma Urbis Romae*, the colossal marble map of Rome.[139]
- The so-called Forum of Nerva was started by Domitian and completed under Nerva in a narrow space, and was an important passage to the *Subura,* and a connection between the Fora already in existence. [140] This Forum basically has the same route as the so-called *Argiletum*, an ancient road connecting Roman

[134] The saddle was destroyed during the demolitions that took place across the whole area during the 1930s.

[135] In general, about *Templum Pacis*, see: R. Meneghini, 'Il Templum Pacis', in R. Meneghini, *I Fori Imperiali* note 132, pp. 79-97; R. Meneghini, 'L'architettura del Templum Pacis', in R. Meneghini, R. Rea (eds.), *La biblioteca infinita. I luoghi del sapere nel mondo antico*, (Rome, 2015), pp. 284- 299.

[136] Everything we knew about the appearance of this forum depended on what was known from the *Forma Urbis Romae*. Most of the *Forma Urbis* fragments are published on the Stanford's University website (https://formaurbis.stanford.edu/); moreover, the latest ones found during the recent excavations are published by R. Meneghini: R. Meneghini, 'La Forma Urbis severiana. Storia e nuove scoperte', in Meneghini–Rea, *La biblioteca infinita*, pp. 327-336.

[137] See Meneghini, *I Fori Imperiali*, note 132, pp. 61-63, and S. Rizzo, 'Indagini nei Fori Imperiali: Oroidrografia, foro di Cesare, foro di Augusto, Templum Pacis', in *RM*, 108, 2001, pp. 215-244.

[138] The opus sectile floor is described in S. Fogagnolo, 'Pavimenti marmorei di epoca severiana del Templum Pacis', in *Musiva et Sectilia*, 2/3, (Pisa-Rome, 2005-2006), pp. 115-141 and F. Montella, 'L'aula di culto della Pace: il periodo severiano', in Meneghini-Rea, *La biblioteca infinita*, pp. 276-283.

[139] The latest work about *Forma Urbis* are: R. Meneghini 'La *Forma Urbis* severiana. Storia e nuove scoperte', in Meneghini-Rea, *La biblioteca infinita*, pp. 327-336; R. Meneghini, R. Santangeli Valenzani (eds), *Formae Urbis Romae: nuovi frammenti di piante marmoree dallo scavo dei Fori Imperiali*, (Rome, 2006).

[140] For this forum, see note 132 and R. Meneghini, C. Parisi Presicce (eds.), 'Il foro di Nerva. Nuovi dati dagli scavi recenti', in *Scienze dell'Antichità, vol. 21.3*, 2015, (Rome, 2016).

Forum and *Subura*.[141] The temple is dedicated to Minerva and survived until 1606, when it was demolished in order to reuse the ancient materials.[142] Nowadays, it is still possible to see two of the eastern porticoes' columns, made of *pavonazzetto* marble, through which there was one of the passages to *Templum Pacis*, known as the *Colonnacce*; however, most part of it is still underneath the modern *Via dei Fori Imperiali*.[143]

- The final imperial forum to be built was Forum of Trajan, inaugurated by Trajan in AD 112.[144]; as with the other Fora, there was a huge courtyard (110m x 85m) with two long porticoes, and a huge semi-circle of 40m (the diameter) closing the courtyard on long sides.[145] On the southern side, there were some luxuriously decorated buildings with uncertain functions, and opposite them there was the so-called *Basilica Ulpia*, a massive court-room (up to 40m high) that survived into the Middle Ages - although little is known about its appearance.[146] From here, it was possible to enter a small courtyard where stood Trajan's column, flanked by two identical rooms (20 x 32m)

[141] For a wider discussion of roads and itineraries, see Section 4.7.

[142] Actually it was just an optical illusion because, as we said, there was not enough space for complete porticoes. See Meneghini, *I Fori Imperiali*, pp. 72-75, and Fig. 71, p. 77

[143] The first hypothesis was that it was dedicated to Janus, and thus this forum was the only one with two temples. Only further analysis has demonstrated that most likely it was the original project of the temple of Minerva, and then changed for structural problems. See Meneghini, *I Fori Imperiali*, and H. Bauer, 'Il Foro transitorio e il Tempio di Giano', in *RedPontAcc*, 49, 1976-1977, pp. 117-150.

[144] See note 132. In order to build this forum, first of all they again needed to create some space, thus they excavated part of the slope of the Quirinal Hill: the demolition of a mons (mountain) is mentioned in the inscription on the basement of Trajan's column. In particular, it has been calculated that thousands of people were needed for such demolition: see E. Bianchi, R. Meneghini, 'Il cantiere costruttivo del Foro di Traiano', in *RM*, 109, 2002, pp. 395-417.

[145] About the statue, it is known from the ancient written sources that it was bronze, and it was massive, as it has possible to see from the sign of the basement: it reached 10 or 12 m high. In particular, nowadays we can appreciate how this statue looked like from the contemporary coins. See R. Meneghini, 'Ricostruzione architettonica e analisi strutturale', *RM*, 108, 2001, pp. 245-268, and Meneghini, *I Fori Imperiali*, Fig. 79, p. 87.

[146] See C. M. Amici, *Foro di Traiano: Basilica Ulpia e biblioteche*, (Rome, 1982).

traditionally identified as libraries.[147] The Forum of Trajan was (apparently) the only forum without a temple, but recently it has been hypothesised that the libraries and the column can together be interpreted as sort of sacred buildings, which celebrated the Emperor and his wife.[148]

4.3 - Medieval and Modern Evidence

To understand post-classical change, first of all, it is key to recognise is that the present-day layout of this monumental imperial area is the consequence of the massive excavations carried out under Mussolini during the 1930s, in order to create the *via dell'Impero* (now, *via dei Fori Imperiali*).[149] The works demolished both the Renaissance quarter that that existed, and all the archaeological remains which did not belong to the ancient Imperial period. The immediate consequence was the loss of most of the archaeological layers dated from the second century AD onwards. Fortunately, a series of recent excavations in areas not removed in the demolition (1991-2007)[150] have offered information about this area for the post-classical centuries. What have those excavations revealed of the post-Roman use of this area?

In general, before the twentieth century demolition, all the Fora experienced both the reuse of classical buildings and some massive spoliations, which mostly started

[147] For the libraries: recent studies have hypothesised that most likely their function was changed from the original project , see R. Meneghini, 'Nuovi dati sulla funzione e le fasi costruttive delle "Biblioteche" del Foro di Traiano', in *MEFRA* 114, 2002, pp. 655-692. For the column: the basement of the column is 6m high, and it is decorated with reliefs representing piles of military weapons. On the southern side of it, there is a door to a small room where most likely there were the urns of Trajan and his wife. Then, in the same room there are the stairs (185 steps) going up to the top of the column, where there was a massive bronze statue of Trajan, known only from contemporary coins; see E. La Rocca, 'Templum Traiani et columna cochlis', in *RM*, 111, 2004, pp. 193-238; and P. Gros, 'Les enjeux historiques du débat sur l'ordonnance du Forum de Trajan', in *CRAI*, 1, 2005, pp. 173–197.

[148] See J.E. Packer, *The Forum of Trajan in Rome. A Study of the Monuments*, (Berkley-Los Angeles, 1997), and J. E. Packer, '"*Templum Divi Traiani parthici et Plotinae*": a debate with R. Meneghini', in *JRA*, 16, 2003, pp. 109-136.

[149] See D. Manacorda (ed.), *Il piccone del regime*, (Rome, 1985), and AA.VV., *L'invenzione dei fori imperiali. Demolizioni e scavi: 1924-1940*, (Rome, 2008).

[150] See Meneghini, *I Fori Imperiali*.

during the ninth century. In fact, before moving to the description of the changes that affected each forum, it is crucial to stress these key factors.

Firstly, the new uses of the Imperial Fora. As Roberto Meneghini has recently summarised,[151] already from the fourth century AD (especially in *Templum Pacis*) the original functions of the Fora totally changed: while initially some of them became the venue of some market activity from the end of the fifth century, the variety of activities increased such as metal-working in the Forum of Caesar and lime-working in the Forum of Trajan from the end of the seventh century. In particular, the demolition of ancient buildings in order to obtain building materials, such as lime, was something that required much effort, and therefore needed specialised workers. In fact, during the fifth century leading up to the fifteenth century, demolitions in the monumental centre of the city were almost continuous, with peaks in the periods characterised by the creation of more public buildings, as during the ninth century.[152] In addition, Riccardo Santangeli Valenzani explains the large quantity of lime that could be obtained from all the white marble that originally covered the ancient buildings.[153] In order to demolish and burn this much heavy material, many people were required. Clearly such effort of people and materials was related to important projects, mainly those of the popes. At the same time, all the medieval dwellings found in this area had some re-used ancient materials, confirming how this kind of practice remained prevalent.

While the reuse of the architectural decorations, such as capitals, was limited to specific requests and/or buildings, all the archaeological remains that we see nowadays, totally deprived of any kind of marble facing, must have displayed

[151] See R. Meneghini, 'Fori Imperiali. Testimonianze di attività produttive medievali', in Molinari *et al*., *L'archeologia della produzione a Roma*, pp.143–152.
[152] See Meneghini-Santangeli, *Roma nell'Altomedioevo,* pp. 29-102.
[153] See R. Santangeli Valenzani, 'Calcare ed altre tracce di cantiere, cave e smontaggi sistematici degli edifici antichi', in Molinari *et al., L'archeologia della produzione a Roma*, pp. 335-344.

impressive quantities. Other data come from the analysis of the ratio between the coloured marble and the white ones found in archaeological excavations. The percentages of the coloured marble are higher than the white ones in these. It is unlikely that this was originally the case if we consider that precious coloured marble was mostly used for enriched decoration, and not as the primary material in the decorations at all.[154] This means that the ratio is affected by the absence of most of the white marble used for lime, although the coloured marble that could not be used for lime is now more commonly used.

Finally, we can note that the spoliation of ancient monuments was forbidden by law in 1363.[155] Eventually, however, it recommenced because this law concerned only the "visible" monuments, and, as a consequence, whenever there was need for some ancient materials, it was common to excavate underground quarries. These are known in most of the excavations in the centre of the city where post-medieval activities have modified and removed the original archaeological deposits. It is important to stress this phenomenon, as it offers key insights into the archaeological layout of the area, for both the classical and medieval periods.

At the same time, the whole area was characterised by its own network of roads (Fig. 18), which was also crucial in the development of the post-ancient layouts, affecting each forum in a different way – and here is the importance of the excavation at the *Vicus ad Carinas*. As we will see, each one has had a different story, despite being part of the same area.

[154] Alessandro Mortera, personal communication.
[155] See C. Re, *Statuti della città di Roma*, (Rome, 1880), p. 188.

Figure 18: Ancient itineraries in the area of the Imperial Fora. Keys: Red line - *Vicus ad Carinas*; Blue line - *Argiletum*; Yellow area - Templum Pacis; Light blue area: Forum of Nerva; Green line – *Vicus Iugarius*. (Source: original from Palombi 2016, Fig. 62, p. 130; reediting by L. Campagna.)

4.3.1 – The Forum of Caesar during the Middle Ages

Starting from Forum of Caesar, the most recent excavations have revealed the presence of workshops in the *tabernae,* which likely belong to the mid-fifth century.[156] These are the only archaeological evidence that can be dated before the ninth century, when some dwellings were built in this forum. In fact, after the spoliation of the original ancient floor, two dwellings of perishable materials, such as wood, were

[156] In fact, part of one of the *tabernae* of the forum was occupied by a metal-working workshop, most likely close to a bone-working workshop as well; see Meneghini, *I Fori Imperiali*, pp. 120-122.

built in the old Forum, dated to the first half of the ninth century (Fig. 19).[157] Excavations revealed the foundations of these rectangular dwellings: one (7.7 x 2.8m) was bigger than the other (4.7 x 2.8m), and surrounded by vegetable gardens.

Figure 19: The red markings in the picture show the archaeological tracks of the basement of the *domus terrineae* found in the Forum of Caesar. (Source: Meneghini 2017, Fig. 6, p. 19)

These were intended for subsistence, presumably for those who lived there. These dwellings are the earliest medieval examples found in Rome, and can be identified as *tendiae*, as suggested in later written sources, despite the reference it is not directly

[157] For the medieval dwellings in Rome, see R. Coates-Stephens, 'Housing in Early medieval Rome, 500-1000 AD', in *Papers of the British School at Rome*, 64, 1996, pp. 239-259; R. Santangeli Valenzani, 'L'insediamento aristocratico a Roma nel IX-X secolo', in M. Royo, É. Hubert, A. Béranger (eds.), *Rome des quartiers: des vici aux rioni. Cadres institutionnels, pratiques sociales, et requalifications entre antiquité et époque moderne. Actes du colloque international de la Sorbonne (20-21 mai 2005)*, (Paris, 2008), pp. 229–245; R. Santangeli Valenzani, 'Paesaggio Urbano e Strutture Economiche a Roma nell'alto Medioevo: II Contributo delle Indagini Archeologiche', in E. Jeffreys (ed.), *Proceedings of the 21st International Congress of Byzantine Studies: London, 21-26 August, 2006 (Vol. 1-3)*, (Aldershot, 2007), pp. 131-144; R. Santangeli Valenzani, 'Abitare a Roma nell'alto medioevo', in L. Paroli, L. Venditelli (eds.), *Roma dall'antichità al medioevo. 2. Contesti tardoantichi e altomedievali*, (Milan, 2004), pp. 41-59, and R. Santangeli Valenzani, 'Residential building in early medieval Rome', in J. M. Howard Smith (ed.), *Early medieval Rome and the Christian West*, pp. 101-112. Then, for a general description of the Forum of Caesar during Middle Ages, see note 132.

of the Forum of Caesar, their description matches the archaeological evidences that have been found (Fig. 20).[158]

Figure 20: Hypothetical reconstruction of the Forum of Caesar in the tenth century. (Source: Meneghini 2009, Fig. 281, p. 215)

Later, during the second half of the ninth century, both the dwellings and the vegetable gardens were removed in order to create a bigger and well-organised vegetable garden, characterised by vines and fruit trees (called *vinee* or *horti* in the written sources).[159] The new arrangement of the area did not last for long, since at some point in the late ninth or early tenth century, this latest vegetable garden was covered by a road, which was lined by dwellings. These new dwellings were totally different from the ninth century ones: during the excavations five were discovered, all made of small walls of re-used materials, such as marble pieces and clay. Such

[158] See Hubert, *Espace urbain*, pp. 169-200.
[159] Ibid., p.130 and p.201.

dwellings are called *domus terrineae*.[160] Finally, during the eleventh century, the Forum of Caesar was definitely abandoned due to it being increasingly swampy despite continuous attempts at raising the ground level in order to solve the problem.

Evidently, all the phases presented above were the consequence of a single decision: as mentioned before, all the Fora were progressively privatised, and in this particular case there is a hypothesis about one of the owners. For the tenth century, the written sources always refer to the street called the *clivus Argentarius* as the *Ascesa Proti*, meaning the future Leo VIII, who was *protoscriniarius sedis apostolicae*, one of the pontifical offices.[161] This street passed close to the Forum, and it makes sense that the Forum itself was part of Leo's properties. As a consequence, it has been hypothesised that all the changes that happened in the Forum of Caesar during the tenth century were related to the future Leo VIII, even if there is no conclusive evidence to support this.[162] Finally, for centuries after c. 1100, the archaeological evidence is scarce due to the building of the Renaissance quarter which erased parts of the previous structures.

4.3.2 – The Forum of Augustus during the Middle Ages

By contrast, in Forum of Augustus, the archaeological remains of the ninth and tenth centuries are scarce. In fact, after the previously mentioned spoliation that affected the whole area of the Fora in the ninth century, evidently this Forum was not affected by massive transformations. Some archaeological layers dated from the twelfth to the fifteenth century show the increase of the ground level, most likely in

[160] See Hubert, *Espace urbain*, pp. 172-178.
[161] See S. Passigli, 'Urbanizzazione e topografia a Roma nell'area dei Fori imperiali tra XIV e XVI secolo', in *MEFRM*, 101-1, 1989, p. 273-325.
[162] See Meneghini, *I Fori Imperiali*, p. 150.

connection with its use as a vegetable garden. At the same time, on the podium of the classical temple, the medieval monastery of S. Basilio was built. Unfortunately, there were few archaeological remains of this building, and they were demolished during the excavations of the early twentieth century. Nevertheless, from the photographs of those excavations we get some sense of what the medieval monastery looked like, it has been possible to date it to the ninth century from the written sources (Fig. 21). In fact, while the first mention of the monastery is dated to 955, the presence of the cult of S. Basilio in the area of the Imperial Fora dates back to the ninth century.[163] The photos show a kind of hall on the southern side of the podium. Some traces on the walls suggest the presence of a portico aligned to an internal garden, and the church itself was most likely on the northern side of the podium.

[163] The first mention is in a papal seal by Agapitus III, and is dated to 955. Nevertheless, during the demolitions in the 1920s, some medieval decorations dated to the ninth century were still *in situ*; at the same time, Bordi confirms as well that the cult of S. Basilio dates back to the first half of the ninth century. See G. Bordi, 'L'affresco staccato dalla chiesa di S. Adriano al Foro Romano. Una nuova lettura', in *Studi Romani*, 48, 2000, pp. 5-25.

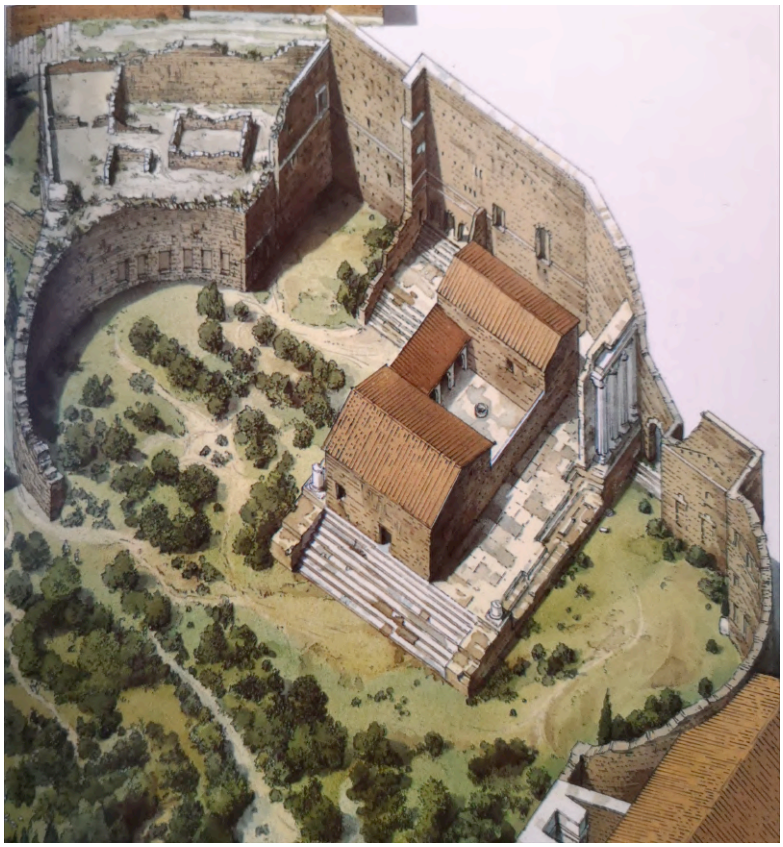

Figure 21: Hypothetical reconstruction of the Forum of Augustus in the tenth century. (Source: Meneghini 2009, Fig. 274, p. 209)

This arrangement totally changed in the twelfth or thirteenth century, when the level of the floor was increased in order to build a new church dedicated to S. Basilio, the remains of which were found during the 1920s demolitions.[164] In particular, this rebuilding is related to the presence of the Knights Hospitaller, who owned this area from the end of the twelfth century to the end of the fourteenth century, when the Order was moved to the monastery of S. Alessio, on the Aventine Hill - but kept their property at the Forum of Augustus. [165] In 1566 the area became the property of the order of the nuns of the Santissima Annunziata.[166] Finally, as with all the post-antique buildings of this part of the city, all the medieval remains were destroyed at the start of the twentieth century.

[164] See Meneghini, *I Fori Imperiali*, pp. 139–142.
[165] Ibid.
[166] See Meneghini, *I Fori Imperiali*, p. 144.

4.3.3 – The Templum Pacis during the Middle Ages

The *Templum Pacis* had a completely different development. The first thing to note is that it is the only Forum that started to be re-used with different functions already from the fourth century. In fact, the 1998-2000 excavations reveal that during the fourth century the *templum* started to be used for commercial purposes:[167] the *euripi* were demolished, to allow new structures, while the marble floor of the western porticus started to be removed. Pre-existing structures were partially demolished to level off the area of the courtyard. The new, commercial function was related to the construction of the Basilica of Maxentius, as the former *Templum Pacis* started to have the functions of the area now covered by the basilica: in fact, being the basilica right above the area of the *Templum*, the commercial area that was originally there was moved down, in the area of Templum Pacis, which had already lost its original function.

This situation lasted until the sixth century when, due to the crisis related to the Gothic War (534-554), many structures were demolished and the Templum lost its commercial purpose. At about this time, there is an important description of *Templum Pacis* by Procopius, who describes the remains of the buildings as an abandoned ruin where animals graze. [168] At the same time, from this description, we know that some of the statues and fountains were still in place, while Procopius tells that the Forum had previously been hit by lightning, which caused a fire, and probably destroyed part of the roof of the *Forma Urbis* room. As Ghilardi argues,

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[167] See M. Ceci, R. Santangeli Valenzani, 'Impianti tardoantichi nel Foro della Pace', in *Ricerche in corso sui magazzini romani, Incontro di Studio. Museo Nazionale Romano, Palazzo Altemps*, *Roma. 13-15 aprile 2011*, (Rome, 2011); A. Corsaro, 'Gli scavi della Sovrintendenza Capitolina (1988-2000 e 2004- 2006): il settore nord occidentale del Templum Pacis', in R. Rea, R. Meneghini (eds.), *La Biblioteca infinita. I luoghi del sapere nel mondo antico*, (Rome, 2014), pp. 258- 266.

[168] See M. Ghilardi, 'Trasformazioni del paesaggio urbano. Il *Templum Pacis* durante la guerra greco-gotica. (A proposito di Procop., Goth. IV 21)', in M. Ghilardi, C. J. Goddard, P. Porena (eds.), *Les cités de l'Italie tardo-antique (IV-VI siécle). Institutions, économie, société, culture et religion*, École française de Rome, (Rome, 2006), pp. 137-148.

despite some narrative exaggerations, Procopius' descriptions are credible: he had visited the *Templum Pac*is during its transformation, and it is likely that part of the original decoration was still in place, while other parts of the building were in ruin. Moreover, further archaeological evidence partially supports Procopius' general picture: burials appear in the area of *Templum Pacis* from the sixth century, making it the first Imperial Forum to witness this phenomenon. Santangeli Valenzani dates the first dismantling of the marble map to this period: as mentioned before, the room housing the *Forma Urbis* was probably ruined by fire, and the roof destroyed wholly or partially.[169] Just before this the church of Ss. Cosma and Damiano was founded by Pope Felix IV (527), suggesting the possible continuity of a medical facility here:[170] the church was founded inside one of the halls in the south-eastern side of *Templum Pacis*, and nowadays the entrance is above the former *Forma Urbis* room. After the spoliation, the northern part of the *Templum* became a dump for all of the unusable materials taken from all the Fora.

During the second half of the ninth century, a terrace wall was built and this part of the *Templum Pacis* started to be used as a vegetable garden. Most likely this was connected to the church nearby, since other churches were characterised by the presence of vegetable gardens (e.g. the church of S. Basilio in the Augustan Forum). This function lasted until at least the thirteenth century.

The presence of vegetable gardens in Rome's old centre fits the medieval written sources, which mention *campi* and *horti* (spreading in Rome), even if we do not have any source either specifically mentioning the presence of a garden in this Forum, or describing such gardens in detail. For the southern part of *Templum Pacis*, the

[169] See R. Santangeli Valenzani, 'Distruzione e dispersione della Forma Urbis severiana alla luce dei dati archeologici', in Meneghini-Santangeli, *Formae Urbis*, pp. 53-60.

[170] See Aulus Gellius: *Gell.*, 5, 21, 9 and 16, 8, 2; Trebellius Pollio: *Hist. Aug., Trig. Tyr*. 31, 10; the dedication of the church to the saints Cosma and Damiano, which are related to medicine, can be seen as a kind of memory of the past function in the new dedication of the church itself.

archaeological excavations have not revealed any evidence of any cultivation. On the other hand, the variety of finds points to the nearby presence of some dwellings. Something similar can be said about some pits used for food conservation, similar to the ones found in the Forum of Caesar, where dwellings have been excavated.

In addition, during the Middle Ages there was a market close by the road passing through Forum of Nerva, known as the *Fundicus Macellorum*.[171] In the thirteenth century, the *Templum Pacis* was affected by another huge spoliation and even the massive columns were removed in order to reuse their capitals for producing lime: these columns were found still on the ground during the excavations, and this points to the abandonment that characterised this forum from the thirteenth century onwards. This use of the *Templum* as a quarry has resulted in deep archaeological deposits, characterised by great quantities of ceramics, marble fragments, and bricks. In fact, this is how the very first recoveries of some fragments of the *Forma Urbis* happened in 1562, during excavations to recover ancient building materials.[172] Moreover, on the eastern side of the *Templum* in 1204 the Torre dei Conti was built, one of the biggest medieval towers of Rome. Unfortunately, the eastern side of *Templum Pacis* has not been excavated yet.

4.3.4 – The Forum of Nerva during the Middle Ages

The Forum of Nerva was the only one not affected by the general spoliation of its paving during the ninth century. In fact, its use as a route of passage protected it from the spoliation, and this function continued through the Middle Ages. Soon, the classical flooring was reinforced with cobblestones, and some dwellings were built on either side of the road. Despite the invasive changes that affected the area

[171] In *Templum Pacis* three huge pits full of horse bones were found; the bones may relate to an abattoir or butcher's shop.
[172] In particular, during the sixteenth century, it was still common to dig for and re-use ancient materials.

between the Renaissance and the early twentieth century, the excavations uncovered two of these dwellings, built in the first half of the ninth century (Fig. 22).[173]

Figure 22: Hypothetical reconstruction of the *domus solaratae* in the Forum of Nerva, dated to the ninth century. (Source: Meneghini 2017, Fig. 269, p. 206)

One is on the northern side of the road, and it uses part of the southern wall of the Forum itself. The dwelling (10.3m x 19m) was made of reused blocks and it had a large courtyard, where a well and a waste pit were found, one on each side. Moreover, on the wall on the side of the water pit, were wooden stairs that led to a second storey. Apparently, the entrance to the lower floor was on the side of the waste pit. On the other side of the road, there was another similar partially excavated dwelling, but probably smaller (most likely 17x8 m). This one was better-built and comprised two rooms; the stairs outside were partially made of stones of reused marble. In general, both of the dwellings found in Forum of Nerva are probably to be related to wealthier families, who most likely lived in the floors

[173] See Meneghini, *I Fori Imperiali*, pp. 130–139.

above, while the ones below were dedicated to services.[174] While the smaller house was largely destroyed due to post-medieval activity, from the large one it has been possible to recover some archaeological layers. These show that during the second half of the ninth century, part of the courtyard was covered by a portico, but the level of the internal floor had already been raised due to the increased level of the road during the first half of the tenth century. These continued over the centuries, and the façade of the building was demolished and the portico was closed at the start of the eleventh century. Inside this evidence of some kind of occupation from this period can be noted, most likely simple dwellings similar to the ones found in the Forum of Caesar.

Finally, after a period during which the building was used as a dump and the level of the ground increased up to 1.5m, sometime during the twelfth and thirteenth century the building became a butcher's shop and remained almost unchanged until the fifteenth century. This is confirmed by the late medieval written sources that refer to this road as '*Fundicus Macellorum de Archanoe*' (Fig. 23) – the *Archanoe* being the arch into the *Subura* mentioned above.

[174] See R. Santangeli Valenzani, 'Abitare a Roma nell'alto medioevo', in L. Paroli, L. Venditelli (eds.), *Roma dall'antichità al medioevo, II. Contesti tardoantichi e medievali*, (Milan, 2004), pp. 41-59.

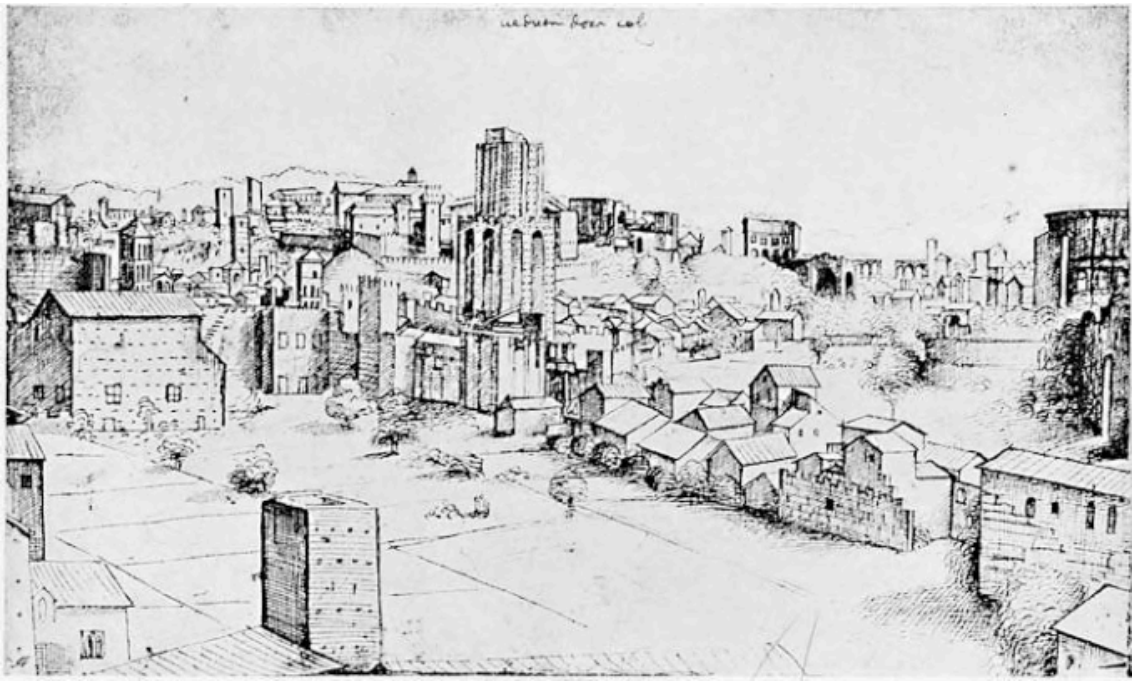

Figure 23: The so-called *Fundicus Macellorum de Archanoè* during the fifteenth century (from the *Codex Escurialensis*). (Source: Meneghini 2017, Fig. 4, p. 293; originally from ©Bildarchiv Foto Marburg, Nr. LR 512/55)

Fortunately, it has been possible to identify the owner of this area in the fifteenth century as Giovanni dello Priete, who owned all the shops on the southern side on the road.[175] At that time, on the opposite side of the road, the sources mention a small church called S. Maria in *Macello Martyrum* or S. Maria de Archanoe, but that area remains to be excavated.[176]

4.3.5 – The Forum of Trajan during the Middle Ages

We have some relevant archaeological evidence from the Forum of Trajan too. After the presence of a lime-workshop in about AD 700 when some ancient marbles were destroyed in order to obtain building material,[177] this forum was characterised by a period of abandonment, testified to by a coherent archaeological mud layer. During

[175] See Meneghini, *I Fori Imperiali*, p. 138.
[176] The first mention of this church is dated to 1192. It was demolished in 1932. See Meneghini, *I Fori Imperiali*, p. 139.
[177] See notes 182 and 183.

the second half of the tenth century, the old Forum was affected by many building activities.[178] The paved surface level was restored, in order to create efficient roads. Along these, there were remains of some buildings dated to the ninth or tenth century, and, most likely, used as dwellings.[179] However, as often in this area, early medieval evidence is really scarce, although some tenth century deposits have been recognised as the preparation for vegetable gardens. It is therefore clear that such complex layout confirms that this forum was already quite densely inhabited from the tenth century onwards, as most likely there were several dwellings: clearly, this Forum was characterised by a well-defined residential function as early as the tenth century, and this function was never really affected by later transformations – in fact, the Forum of Trajan remained one of the most inhabited areas until the modern demolition.[180]

During the excavations it was also possible to recognise another kind of dwelling, typical of the twelfth and thirteenth centuries, thus confirming an uninterrupted use of this area. These dwellings were characterised by several floors with a garden to the back of the house, and an entrance set directly on the road. At the same time, other buildings were built close by: for example, the church of Santa Maria in Campo Carleo, the first phases of which have been dated to the tenth century, was renovated by the start of the thirteenth century.[181] Later, a new church dedicated to S. Urbano was built during the thirteenth century, occupying part of the garden of the church of Santa Maria – though the excavations could not recognise its foundation walls as it was rebuilt during the seventeenth century.[182] Finally, the excavations traced the remains of another building, dated to the thirteenth century and identified

[178] All the activities that involved this forum have been related to a Roman noble called *Caloleous*. See below.
[179] See Meneghini, *I Fori Imperiali*, p. 150.
[180] See Meneghini, *I Fori Imperiali*, p. 153-155.
[181] For this church, see Meneghini, *I Fori Imperiali*, p. 153, and Meneghini, *I Fori Imperiali e I Mercati di Traiano*, p. 217.
[182] See Meneghini, *I Fori Imperiali*, p. 155, and Meneghini, *I Fori Imperiali e I Mercati di Traiano*, p. 225.

as belonging to the hospital of the Knights Hospitaller, who also occupied part of the Forum of Augustus.[183]

As detailed above, the area of the Forum of Trajan was clearly affected by massive transformations, once during the tenth century and again in the twelfth or thirteenth century. In particular, for the tenth century, such reconstruction has been related to the owner of the area, who has been identified using the written sources: the name *Campus Kaloleonis* or, later, *Campo Carleo*, used for this area in the medieval written sources, refers to a nobleman called *Caloleous*, who supported Prince Alberico, one of the main figures in city politics in the early tenth century.[184] Potentially, therefore, the huge effort to rebuild the area can be easily explained in relation to this person. Noble families were also associated with some of the later thirteenth-century transformations, like the mentioned church of S. Urbano, whose construction was connected to a noble woman called Iacoba, of the Bianco family.[185] Likewise, excluding the few cases that have been mentioned, due to lack of relevant information we cannot accept the connection between massive changes and high-level families, as a general rule. However, this Forum remained densely populated until the sixteenth century, as revealed in some written sources describing its vibrant life.

Other activities are known: a pottery kiln dated to the second half of the fourteenth century, but built over an earlier one dated to the first half of the fourteenth century.

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[183] These remains have been identified depending on both the analysis of it building techniques, and the written sources, which mention this building from 1217. See Meneghini, *I Fori Imperiali e I Mercati di Traiano*, p. 228, and N. Bernacchio, 'L'ospedale dei Cavalieri di S. Giovanni di Gerusalemme a Roma', in *Arte Medievale, N.S.*, 1, 2002, 1, pp. 127-274; N. Bernacchio, 'L'ospedale dei Giovanniti nel Foro di Traiano e l'architettura ospedaliera a Roma nel tardo Medioevo', in C. Ciammaruconi (ed.), *L'Ordine Templare nel Lazio meridionale*, (Casamari, 2003), pp. 247-274.

[184] Meneghini, *I Fori Imperiali e I Mercati di Traiano*, p. 214.

[185] Iacoba bought part of the vegetable garden of the church of S. Maria, in order to build this new church, see *ASR*, *Archivio dell'Ospedale del Ss.mo Salvatore ad Sancta Sanctorum, Archivio Antico*, vol. 510, Arm. VIII, Mazzo VIII, n. 1.

Most likely it was used to bake bread. From some written sources, it has been possible to identify the owner of this workshop, Giovanni Boni, a potter originally from Brescia. Documents indeed describe the limits of this workshop, which correspond to what has been found during the excavations. This kiln was active between the fifteenth century and the start of the sixteenth, and produced mainly Majolica.[186] The plot was divided into the internal area and the back courtyard, where there was the small kiln. Close by the kiln, the archaeologists found a rubbish pit as well, full of discards of majolica production, such as coarse vessels without the glazed surface, or coarse vessels used for rough works. Overall, this pit contained thousands of sherds, which show different phases of ceramic production; among them, some so-called *biscotti* (the step just before glazing, thus unfinished and unglazed sherds), which are an intermediate step before the complete vessel. However, this Giovanni Boni died in 1520, and it is interesting to see how the archaeological deposits likewise date the end of this workshop to the same period.[187]

4.3.6 – Modern Transformations of the Imperial Fora

As seen, each Forum underwent different changes, and the key events can be summarised thus:

- After the ninth century there was the very first, large-scale spoliation of the ancient floors, due to great demand of building materials related to new buildings built by the popes;

[186] See P. Güll, *L'industrie du quotidien: production et consommation de la céramique à Rome entre XIV et XVI siècle*, (Rome, 2003), pp. 62-63; R. Meneghini, R. Santangeli Valenzani (eds.), *Roma. Lo scavo dei Fori Imperiali 1995-2000: i contesti ceramici,* (Rome, 2006); R. Meneghini (ed.), *I Fori dopo i Fori - La vita quotidiana nell'area dei Fori Imperiali dopo l'Antichità*, (Rome, 2017).
[187] See Meneghini, *I Fori Imperiali e i Mercati di Traiano*, pp. 233-234.

- By the first half of the ninth century, some modest dwellings in the Forum of Caesar, and the *domus solaratae* in the Forum of Nerva were built, while we have the first mentions of a cult of S. Basilio in the Forum of Augustus;
- By the tenth century, some dwellings often with vegetable gardens, such as the Forum of Nerva and the Forum of Trajan, occupied some of the old Fora. Moreover, the importance of ancient routes increases, as there is evidence that they were continuously maintained;
- From the eleventh century onwards this area is characterised by general stability, in terms of changes and transformation in the layouts of the Fora. For example, while the Forum of Caesar and part of the *Templum Pacis* were abandoned, others were affected by small changes;
- Between the twelfth and thirteenth century, both the Forum of Nerva and the Forum of Trajan started to be densely populated, and from the thirteenth century onwards, the numerous conflicts among the Roman noble families caused the partial fortification of this area, as demonstrated by the Torre de' Conti on one side, and the Torre delle Milizie on the other side, above the Forum of Trajan. [188]

Obviously, the almost continuous changes in the area have caused the loss of most of the archaeological layers dated to the Early Middle Ages, although the period between the ninth and the thirteenth century is archaeologically more visible.

[188] Here we have not discussed Torre delle Milizie, as generally considered part of Mercati di Traiano, another monumental area connected to Trajan's Forum, and built in the same period. Even though Mercati di Traiano is next to the area of the Fora, here it has not been considered, as the main focus is the area of the Fora. However, for a general overview of Mercati di Traiano, see Meneghini, *I Fori Imperiali e i Mercati di Traiano*, pp. 165-192, and pp. 221-225, and R. Meneghini, 'Indagini archeologiche lungo l'area perimetrale dei Mercati di Traiano: settori settentrionale e orientale (scavi 1989-1997)', in *BCom*, 104, 2003, pp. 219-234. As for Torre delle Milizie, its first phases have been dated to the end of the twelfth century, with various phases dated to the thirteenth century. In particular, this tower is mentioned as owned by Bonifacio VIII at the end of the thirteenth century: see N. Bernacchio, R. Meneghini, 'Roma-Mercati di Traiano: nuovi dati strtturali sulla Torre delle Milizie', in *Archeologia Medievale*, 21, 1994, pp. 31-56.

Moreover, as mentioned earlier, the massive changes to this area made during the late Renaissance truly affected the preservation of the medieval layers: during the sixteenth century, the growth in population caused the increase in buildings as well. Significantly, during that period the area of the Imperial Fora had few owners, and thus it was easier for large-scale changes to be made.[189]

First of all, the remaining ancient materials were extracted in order to reuse them, and then, due to the increasing population, the *quartiere Alessandrino* was built. This was a new district, mostly created by the Cardinal Michele Bonelli, who was the nephew of Pope Pius V (1566-1572), called *Alessandrino* because Alessandria was his birthplace.[190] The area was reclaimed, and new buildings were erected: finally the co-existence between inhabited and uninhabited areas finished, and this part of the city became densely occupied.[191] Here, it is crucial to stress that once the Renaissance quarter was built, there was no more memory of the previous medieval and ancient quarters: even the limits of each Forum were not clear anymore. On the other hand, the memory of the medieval churches was always maintained, as well as the ancient streets, which were core to the new Renaissance streets that mostly followed the previous street plan. In the sixteenth century the area was rapidly occupied by new buildings, mostly low-level dwellings, and it became an extension to the area of the *Subura*, steadily populated since the Imperial period: the Renaissance buildings incorporated and hid the ancient ruins, and the new quarter was highly populated.[192]

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[189] The areas that were owned by the Knights Hospitaller, were managed by Cardinal Michele Bonelli since 1568, while other parts of Imperial Fora were properties of either Ghislieri family, or Della Valle family. See A. Prosperi, 's.v. Bonelli, Michele', in *Dizionario Biografico degli Italiani*, 11, (Rome, 1969), pp. 766-774; A. Pugliese, 'Abitanti e abitazioni del quartiere Alessandrino', in R. Meneghini, R. Santangeli Valenzani (eds.), *Scavi dei Fori Imperiali, Il Foro di Augusto: l'area Centrale*, (Rome, 2010), pp. 211-229.

[190] See S. *Rizzo*, 'Il progetto Fori Imperiali', in S. Baiani, M. Ghilardi (eds.), *Crypta Balbi – Fori Imperiali, Archeologia urbana a Roma e interventi di restauro nell'anno del Grande Giubileo*, (Rome, 2000), pp. 62-78.

[191] See Pugliese, 'Abitanti e abitazioni'.

[192] See Meneghini, *I Fori Imperiali e i Mercati di Traiano*, pp. 236 – 240.

This Renaissance quarter lasted for almost 250 years, until the 1930s saw the peak of the destructive interventions, when the modern *via dei Fori Imperiali* was built: the street was inaugurated in 1932 by Benito Mussolini himself, making the classical ruins an ideologically vital backdrop.

Archaeological interest in the area began as early as the end of the nineteenth century, when the so-called "Napoleonic excavations", aiming to recover part of the *Basilica Ulpia*, stopped the development of the Renaissance quarter to the north. From that moment, increasing interest about the ancient ruins led to numerous demolitions and excavations, sometimes even promoted by popes, at least until the start of the modern demolitions under Mussolini in the 1930s, which destroyed all the archaeological evidence. As a consequence, almost everything post-classical was demolished, starting from the Renaissance buildings still in place, thus compromising understanding of the historical sequence of this area. Yet, from both the modern maps (i.e. Tempesta map, Fig. 24, dated to 1593, and Nolli's map, dated to 1748) and early twentieth century photographs, it is possible to reconstruct what this district looked like.

Figure 24: In this drawing, dated to 1593 by A. Tempesta, it is possible to identify the Alessandrino district for the first time. (Source: Meneghini 2009, Fig. 323, p. 242)

During the archaeological excavations it was possible to find only the basements of early modern buildings that have been destroyed. As a result, with most of the medieval and modern layers and buildings destroyed, our ability to understand the development of the area has been compromised. Nevertheless, the archaeological excavations in the area of Imperial Fora between 1991 and 2007 have managed to increase our ability to analyse the post-classical and medieval development of this part of the city. Below we will analyse the ceramics finds from this area, and how they fit into the general overview that has been done in Chapter 1.

4.4 - *Vicus ad Carinas*

Given that the recent excavations in the area of the *Templum Pacis* were in an area just outside the forum itself, on the route of the so-called *Vicus ad Carinas* (Figs. 18, 25, 26 and 27), we must briefly summarise the sequence of this area, called Area 5 in

the excavations. This area is on the southern side of the *Templum Pacis*, just outside the area once occupied by the Forum itself. It was excavated from summer 2015 to winter 2017.

Figure 25: Plan showing the excavations at the *Templum Pacis*. (Editing by A Mortera.)

As observed, this part of the city continued to be used through the Middle Ages, with a distinctive reuse of the monumental classical remains. In particular, most of the main streets maintained their original itineraries, and few new ones were created. The key change was the level of soil, which was raised during the centuries and often reached up to three meters higher than the original ancient level during the Late Middle Ages.[193] In addition, the importance of such fixed routes is confirmed by the so-called Einsiedeln itinerary, which is the most detailed (and complete) medieval itinerary for Rome, as it includes both monuments and actual

[193] See R. Santangeli Valenzani, 'Strade, case e orti nell'alto Medioevo nell'area del Foro di Nerva', in *MEFRM*, vol. 111, 1999, pp. 163–169; R. Meneghini, 'Le Strade di Roma nel Medioevo', in *Perspektiven der Spolienforschung 2. Zentren und Konjunkturen der Spoliierung,* (Berlin, 2017), pp. 283-310.

routes into the city. Its name derives from the name of the Swiss abbey where it was found, and it is dated to between the end of the eighth and early ninth century.[194]

These kinds of itineraries, listing all the main buildings of Rome, must have been quite common although the Einsiedeln one is now the most complete.[195] It is divided into different sections, and one of its parts contains ten routes that pass across the city, listing almost a hundred buildings, both ancient and religious. Certainly, the importance of this topographical list is enormous: it lets us figure the main topographical layout of the city during the ninth century, and confirm the hypothesis of the general continued use of the ancient roads. In fact, it is possible to identify the same roads for each of the ten itineraries used in the classical period. In particular, the first and the seventh of the Einsiedeln itineraries include the medieval passage through Forum of Nerva, which reproduced the same path as the so-called *Argiletum*, which from the third century BC connected the Roman Forum to the *Subura*.[196]

As analysed above, there were ninth-century *domus solaratae* along this road, and their use depended on the use of the road itself: for example, when the level of the road increased, it was raised inside the dwellings as well. Unfortunately, the archaeological remains of these roads are often no longer visible, mostly destroyed by the several transformations that affected the city centre from the sixteenth

[194] See R. Santangeli Valenzani, 'L'Itinerario di Einsiedeln', in *Roma dall'antichità al medioevo. Archeologia e storia*, (Rome, 2001), pp. 154-159, and R. Santangeli Valenzani, 'Le più antiche guide romane e l'itinerario di Einsiedeln', in *Romei e Giubilei. Il pellegrinaggio medievale a San Pietro (350-1350)*, (Milan, 1999), pp. 195-198; C. Hülsen, *La pianta di Roma dell'Anonimo Einsidlense*, (Rome, 1907); C. Hülsen, M. E. Garcia Barraco (eds.), *Roma in epoca carolingia: l'anonimo di Einsiedeln: l'Itinerarium Urbis Romae (VIII-IX secolo)*, (Rome, 2016).

[195] In fact, later itineraries are descriptions of monuments above all, see note above.

[196] See D. Palombi, *I Fori Prima dei Fori: storia urbana dei quartieri di Roma antica cancellati per la realizzazione dei Fori Imperiali*, (Rome, 2016), pp. 135-141.

century. Despite that, the late medieval written sources still mention some of those roads, especially when related to religious processions.[197]

The importance of those itineraries in the medieval city is crucial for analysing the topographical transformations of the area of Imperial Fora. In addition, some medieval roads have been found during past excavations: excluding the previously mentioned *Argiletum*, in the Forum of Trajan excavations have revealed traces of a tenth-century road that was characterised by a pathway as well.[198] Similar archaeological contexts have been found in the Roman Forum, and in the area of the Caelian Hill: the *Vicus Iugarius*[199] connected the Roman Forum and the *Forum Holitorium*, while the *vicus Capitis Africae*[200] connected the Colosseum valley to the Caelian Hill. Their use continued almost without interruption at least until the fifteenth century, proving how much these roads were important for the life of the medieval city. Obviously, the technical characteristics of the roads changed during the centuries, in order to comply with the different needs of the city.

The *Vicus ad Carinas* is not listed on the Einsiedeln itinerary but its importance has been confirmed by the latest excavations which point to continuous use through the tenth century until the first half of the eleventh century.[201] In general, this street used to connect the so-called *Carinae* area on the Esquiline Hill to the Roman Forum, and was still in use during the Middle Ages, but by now it was surrounded by burials. In particular, the creation of *Templum Pacis* to its west affected its structure, most likely unchanged from the most ancient arrangements of this part of the city.

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197 See Wickham, *Medieval Rome*, pp. 344-359.

198 See Meneghini, 'Le Strade di Roma'.

199 See G. Maetzke, 'La struttura stratigrafica dell'area nord-occidentale del Foro Romano come appare dai recenti interventi di scavo', in *Archeologia Medievale*, 18, 1991, pp. 43–200; G. Maetzke, 'II tracciato medioevale del Vico Iugario', in *Archeologia Laziale*, 9, 1988, p. 399-405.

200 C. Pavolini (ed.), *Caput Africae I. Indagini archeologiche a Piazza Celimontana (1984-1988): la storia, lo scavo, l'ambiente*, (Rome, 1993).

201 After the first half of the eleventh century, the archaeological evidence is limited, with the archaeological deposits likely removed during excavations (2000-2001).

In fact, as Domenico Palombi explains, the street existed even before the creation of the Imperial Fora.[202] However, its first mention is found in the Augustan period: Dionysius of Halicarnassus[203] mentioned it as a short-cut to the *Carinae* area, and it is possible to see it in one fragment of the Severan *Forma Urbis*.[204] Most likely, its route did not change before the great works carried out by Nero for his *Domus Aurea*, and the building of *Templum Pacis* afterwards. Certainly, its importance as a quick and direct link was maintained, since only part of the route was moved to East, and incorporated in the new building. In particular, the room identified as the library had a separate entrance from this *Vicus*. Only the building of the Basilica of Maxentius significantly changed the arrangement of the street, whose level rose up to 1.5m higher, and its route was partly incorporated underneath the Basilica itself: during the Middle Ages, this indoor passage was known as the *Arcus Latronis/Latone*, probably because of thieves in the dark passage.[205] The *Vicus* was used until 1565,[206] and part of it became the Renaissance *via del Tempio della Pace*, within the Alessandrino quarter, which was partially destroyed in 1932. Nowadays, it is possible to see its remains between the *Templum Pacis* and Basilica of Maxentius, but part of it remains under the modern streets, including the modern *Via dei Fori Imperiali*, *Via del Tempio della Pace*, *Via dei Frangipane* and *Via delle Sette Sale*. The first

[202] See D. Palombi, *Tra Palatino ed Esquilino: Velia, Carinae, Fagutal. Storia urbana di tre quartieri di Roma antica*, (Rome, 1997); D. Palombi, *I Fori Prima dei Fori: storia urbana dei quartieri di Roma antica cancellati per la realizzazione dei Fori Imperiali*, (Rome, 2016).

[203] Dion. Hal. 1.68.1.

[204] See E. Rodriguez Almeida, *Forma urbis marmorea: aggiornamento generale 1980*, (Rome, 1981), p. 95, tav. XII, l. 15.

[205] See R. Lanciani, 'Supplemento al volume VI del Corpus Inscriptionum Latinarum', in *BC*, (Rome, 1880), p.33; 'L'Itinerario di Einsiedeln e l'ordine di Benedetto Canonico', in Reale Accademia dei Lincei (eds.), *Monumenti Antichi*, vol. I, (puntata III), 1891, p. 555. In particular, we know that during the Reinassance the archway became a dangerous passage; see R. Lanciani 1985, *Rovine e scavi di Roma antica*, (Rome, 1985), pp. 187-189.

[206] See A. Capodiferro, 'Vicus ad Carinas', in E. M. Steinby (ed.), *LTUR*, vol. V, (Rome, 1999), pp. 156-157; G. Lugli, *Roma Antica – Il Centro Monumentale*, (Rome, 1946), p. 227.

discovery of its remains was made between 1893 and 1933,[207] while more specific excavations were made between 1979 and 1986.[208]

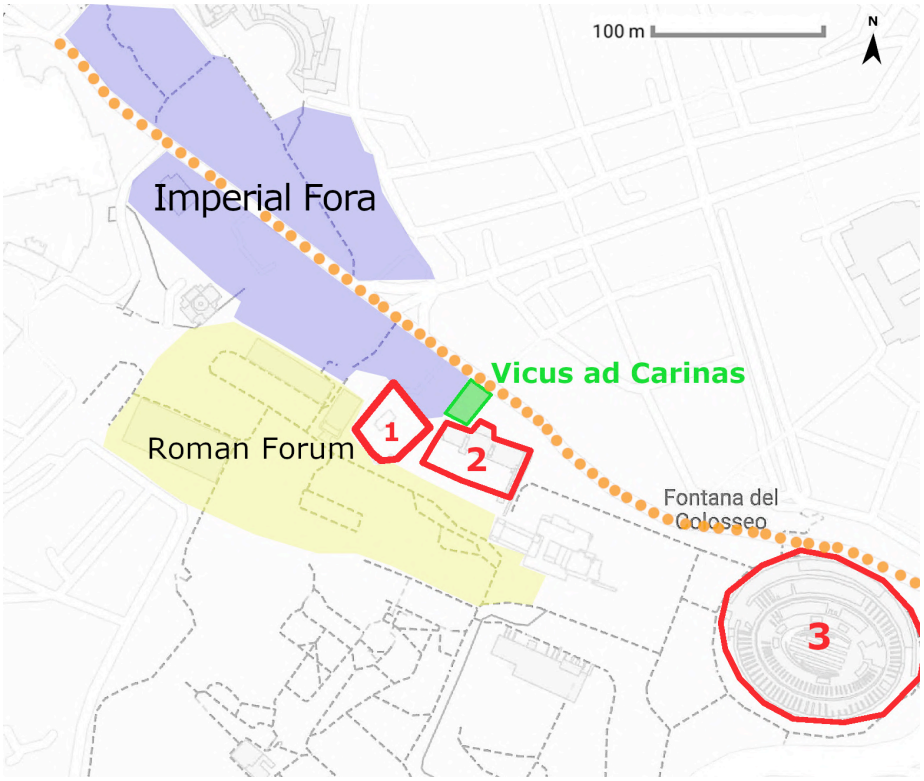

Figure 26: Location of Vicus as Carinas in the area of Imperial For a. Key: 1 – Ss. Cosma and Damiano church; 2 – Basilica of Maxentius; 3 – Colosseum. (Source: original map from Google maps; reediting by L. Campagna)

.Before the most recent excavations and the results presented in this thesis, the Vicus ad Carinas had been studied very little: the current excavations are therefore important for assessing the continuity of use of both some routes, and of the buildings nearby, such as the *Templum Pacis* into the Middle Ages. [209]

[207] C. Buzzetti, A. M. Colini, 'Il Fagutale e le sue adiacenze nell'epoca antica', in *RendPontAcc*, s. III, 26, (Vatican City, 1963-64), pp. 75-91; A. M. Colini, G. Matthiae, 'Ricerche intorno a S. Pietro in Vincoli', in *MemPontAcc*, vol. IX, (Vatican City, 1966), pp. 5-99.

[208] The excavations were made during a specialisation course organised by the Faculty of Architecture of the Università La Sapienza (Roma), and directed by professor Francesca Pallarés and Dr Irene Iacopi (Soprintendenza archeologica di Roma). Giuseppe Morganti excavated another part of the *Vicus* in 1984. See A. Capodiferro, M. Piranomonte, 'Indagini intorno al *Vicus ad Carinas*', in S. Quilici Gigli (ed.), *Archeologia Laziale*, 9, 1988, pp.82-88.

[209] The sources mentioned above give scarce if any information.

4.5 – An Overview of the Ceramics from the Imperial Fora

As detailed, activities from some centuries appear clearer than others: for example, the tenth century seems to have been as important as the sixteenth century in terms of the size of the transformations that affected the whole area of the Fora. Moreover, the common thread of those transformations must be identified in the medieval network of roads: for example, both in the Forum of Nerva and that of Caesar the necessity to pass by there led to the creation, at first, of the streets going to and from the area of the *Subura*, and the houses were the obvious consequence. The *Vicus ad Carinas*, which connected Roman Forum and the imperial district of *Carinae,* must be analysed in the light of this roads network. In addition, when the identity of the Imperial Fora was lost, the new landmarks were the numerous churches: that is the case for the medieval buildings scarcely visible in the Forum of Augustus, but known from the written sources. Then, the analysis of the ceramics found during the excavations adds something more.

As discussed, between 1991 and 2007 most of Imperial Fora saw some excavation, using modern methodologies and recording accurately all the stratigraphic information.[210] Before considering the results of the most recent excavations (2012-2017), it is valuable to briefly report on the medieval pottery found during the 1991-2007 Fora excavations to introduce the latest results from *Vicus ad Carinas*.

The first small assemblage of relevant medieval ceramics (almost 700 sherds) to be published was found inside the Roman drainage system in the Forum of Nerva, and

[210] See S. Baiani, M. Ghilardi (eds.), *Crypta Balbi – Fori Imperiali, Archeologia urbana a Roma e interventi di restauro nell'anno del Grande Giubile*o, (Rome, 2000).

has been dated to the late seventh to early eighth century.[211] Despite its small size this assemblage is really important, both for dating the abandonment of the use of the drainage system, and for being a contemporary comparator with the seventh-century assemblage found in the *Crypta Balbi*.[212] In particular, the presence of precious and rare glass material (cups, bowls) confirms the high status of the families who occupied it even as early as the seventh or eighth century, despite the absence of contemporary structural remains. As for the ceramics, significantly the presence of the latest types of Red Slip ware, and of African amphorae, both dated to the early seventh century. The most recent class is Forum Ware, of which there are few fragments. As for glass, the assemblage included a large variety of forms, such as bottles, phials, stem glasses, glasses, dishes, and lamps.

For the dwellings in the Forum of Nerva the ceramics have been partly published in 2002 by Ilaria de Luca.[213] In particular, a pit on the west side of one of the dwellings contained a group of ceramics dated to the mid-ninth century. This assemblage is characterised by scarcity of residual ceramics and by the good condition of the pots, many of which are complete. Most useful is the Forum Ware, here represented mostly by jugs often decorated with the typical "*pinoli*" (petals).[214] By contrast, the basins and the bowls are less numerous, and for those that survive, the glazed surface is not of as good a quality of the jugs. As outlined in Chapter 1, basins and bowls being a minor production of this class, the lower quality of the cladding is not surprising. In addition, the common and the cooking wares confirm the ninth-century chronology, as they all have the features typical of the early medieval

[211] See I. De Luca, 'Un deposito di fine VII-inizi VIII secolo dal Foro di Nerva', in L. Paroli, L. Venditelli (eds.), *Roma dall'Antichità al Medioevo. II. Contesti tardoantichi e altomedievali*, (Milan, 2004), pp. 571-576.

[212] See L. Saguì, 'La circolazione delle merci: il deposito della fine del VII secolo nell'esedra della *Crypta Balbi*', in Paroli-Venditelli, *Roma dall'Antichità al Medioevo*, pp. 266-306.

[213] See R. Santangeli Valenzani *et al.*, 'Materiali da Foro di Nerva', in De Minicis, *Le ceramiche di Roma e del Lazio in età medievale e moderna IV: Atti dei IV convegno di studi, (Viterbo, 22 - 23 maggio 1998)*, (Rome, 2002), pp. 155-164.

[214] See Chapter 2.

production.[215] Between the eleventh and twelfth centuries, this Forum's use changed: the dwellings were abandoned, and this area was most likely occupied by some artisans. Overall, the finds from this period are characterised by the sizeable presence of glass, glass wastes, and rough glass.[216] Finally, among the glazed wares dated to the eleventh century, a sort of strainer is important for its rarity: while the glazed surface resembles others of that period, both the decorations and the form are atypical. Given a comparison with glassware called "Guttrolf" which was used for precious substances, the function of this specific pot was probably related to the preparation of medicines or infusions, and its importance is related to broader debates regarding the origins of the medieval glazed productions.[217]

Publication of assemblages from the Imperial Fora prompted reanalysis of the same context from Forum of Nerva in 2006, comparing the ceramics from the pit described above to the ceramics found in the latest medieval layers inside the same dwelling, revealed that some sherds were part of the same pot.[218] In total, 1,304 sherds have been analysed, and the types identified confirm a ninth to tenth century date range. As for the classes:

- The most numerous class is the common ware (37%, 488 frgs.), mostly characterised by incised parallel lines as decoration;
- Forum Ware amounts to 23% (301 frgs.), and almost all the sherds belonged to jugs, while fewer are basins and lids;
- Cooking ware comprises 21%, and there are only two main forms: the *olla* (cooking pot) and the *testo* (bread cooker), both typical of the ninth and tenth

[215] For the analysis of the medieval Common Wares, see M. Ricci, 'Ceramica acroma depurata 2. Brocche, catini, orcioli e altre forme minori'; D. Romei, 'Ceramica acroma depurata 1. Anfore, coperchi, piedistalli', in *Crypta Balbi 5*, d,pp.288-307 and pp. 264–287; for medieval Cooking Wares, see M. Ricci, 'Ceramica acroma da fuoco', in *Crypta Balbi 5*, b, pp. 215-249.

[216] In particular, the presence of a great variety of glass stems in these layers enable us to date the introduction of this form to the eleventh to twelfth century.

[217] See De Luca, note 211.

[218] Ibid.

century. In addition, some of the cooking wares have glazed spots on the surface: this suggests that cooking wares and Forum Ware were produced in the same place;

- This assemblage contained 246 residual sherds, just 19% of the total: we will see below that such a low percentage is unexpected, and it might be related to the kind of layers where the ceramics was found.

After these first and partial publications, in 2013 those ceramics found in the whole area of the Imperial Fora were published with the aim of using all the finds from different excavations to create a history of the whole area.[219] We have noted the importance of the innovative approach of this volume, in which whenever in-phase ceramics were absent, this has been explained as "negative" activities, characterised by abandonment and spoliation. From this general view, each Forum has been re-analysed, now considering the differences and the similarities with the others, and connecting all the data to each other for the first time.[220] The results basically confirmed the general view analysed above, which shows how much information there is, potentially, in the ceramic assemblages. In the same volume, some of the ceramic assemblage from the *domus terrineae* in the Forum of Caesar is presented.[221] As a consequence, the 2013 volume is especially important for their analysis of the ceramics from two of the medieval dwellings found during the excavation in 1999-2000.[222]

[219] See Ceci, *Contesti Ceramici dai Fori*, pp. 1-9.

[220] Ibid.

[221] Before this volume, our knowledge regarding the medieval findings from the Forum of Caesar were limited to some ceramics found during the 1970s in a pit dated somewhere between the eleventh and the first half of the twelfth century. This assemblage is mainly made up of Common Wares, as described by Otto Mazzucato. The data from this small pit were not sufficient to characterise the general layout of this area during the Middle Ages. See O. Mazzucato, 'Regione VIII. Foro di Cesare. Rinvenimento di ceramiche medioevali', in *BCom*, 106, 2005, pp. 378-384.

[222] For the medieval dwellings see Section 4.3.

The main characteristic is the large amount of residual ceramics: more than 80% are residual in both dwellings. As for the ceramics in-phase, it is really fragmented, so much so that often it has not been possible to recognise specific types. The forms for each class are also scarce, and only the main ones are represented, such as the *olla* (cooking ware) and the jug (glazed wares). This scarcity has been compared with the more varied assemblages observed for the two *domus solaratae* in the Forum of Nerva, dated to the same period (ninth/tenth century): such differences, and the absence of glass from the dwellings in the Forum of Caesar, have been explained as the result of the different social levels of occupants of the *domus terrineae* and the *domus solaratae*, although archaeological evidence is still not sufficient for confirming such a division.

Finally, the post-medieval ceramics have been partly analysed, particularly given their importance for the late medieval and Renaissance phases that do not survive archaeologically. Despite the demolitions and the construction of Via dei Fori Imperiali, we can recover at least some part of the early modern layers, mostly building basements.

Even though the analysis of the early modern ceramics is not relevant to the main aim of this thesis, their importance is linked to the overall knowledge of the changes that affected this area. As they have not been analysed considering the whole assemblages, thus we do not have data about the residual medieval ceramics, its importance is related to the overall knowledge of the changes that affected this area. For example, some ceramics dated to the sixteenth and seventeenth centuries occur in the area of the hall of the *Templum Pacis*, during two archaeological excavations done between 2000 and 2007. [223] As a result of the excavation of the most recent

[223] See S. Fogagnolo, 'Lo scavo del tempio del Foro della Pace e un nuovo contesto di ceramiche rinascimentali', in R. Meneghini, R. Santangeli Valenzani (eds.), *Roma. Lo scavo dei Fori Imperiali 1995-2000: i contesti ceramici*, (Rome, 2006), pp. 145–167.

phases, it has been possible to recover some modern ceramics. Again, the main feature of this assemblage is the impressive amount of residual and intrusive ceramics, while the classes in-phase are less represented. On the one hand, the high level of pottery fragmentation does not allow us to recognise vessel types and the original context of these ceramics, and on the other hand, the kinds of recognisable decorations and forms point to their everyday use given the absence of any luxurious findings. In addition, the analysis of the decorations on the modern sherds adds important information about the trades of certain forms and, about the imitation of particular ceramics traditions typical of specific areas as well. This is the case, for example, of the so-called "*compendiario*" style, imitating the contemporary ceramics produced in Faenza during the second half of the sixteenth century. As explained previously, the ceramics from the 2000-2007 excavations in the hall of the *Templum Pacis* are not dated to the Middle Ages, but studying these is valuable to see how the area was prepared to build the new quarter, after the Renaissance demolitions. Moreover, the analysis of these modern data is crucial for an overall knowledge of the transformations of this part of the city through the centuries, as excellently summarised by Monica Ceci in the introduction of this latest overall work about the ceramics belonging to the Imperial Fora.[224]

4.6 – The Excavations of Roma Tre University and the *Vicus ad Carinas*

In the Imperial Fora the focus is the *Templum Pacis*, where the Università degli Studi di Roma Tre, collaborating with the Parco Archeologico del Colosseo, started excavations in 2012, directed by Riccardo Santangeli Valenzani, with the latest archaeological campaign ending in November 2017.[225] As noted above, works started on the occasion of the Great Jubilee, and were focused on the worship room. After

[224] See note 219.

[225] The excavation aimed to isolate the street, in order to open it to the public as a new access to the Roman Forum.

almost ten years after those excavations in the N-W part of the room, the university working group resumed here, dividing the site into two areas (labelled Area 1 and Area 2 - Fig. 25).

While excavation of Area 1 lasted until 2015, that in Area 2 continued to 2016, but was stopped for safety reasons, but resumed in September 2018. At the same time, smaller areas (Areas 3 and 4) enabled the analysis of the building process of the Roman monument.[226] From September 2015, Area 5 (Fig. 25) was added to the previous ones, in order to analyse the development of the so-called *Vicus ad Carinas*. Areas 1 and 2, despite being at different depths, are similar in being mostly part of the same huge fill. They were partially excavated during the campaigns of 2000-07, but, on that occasion, they only reached the sixteenth-century deposits, related to basements of the Renaissance district. During the latest excavations, in Area 1, the archaeologists reached the Severan marble floor, while currently Area 2 has only reached eleventh- to thirteenth-century deposits: being part of the same archaeological deposit, their excavation is still not complete, and Area 2 is still higher than Area 1.

Generally, the layers in these two areas are characterised by large amounts of finds, such as marble, metalwork, glass, bones and ceramics. Among the ceramics, classical amphorae are generally the most numerous class, but this is not surprising in Rome, given both the great quantities of this kind of commercial container circulating, and the kinds of actual deposits.[227] A high residuality is particularly common in layers resulting from reclamations as at both the Forum of Caesar and the *Templum Pacis*, where residual ceramics hit a peak of 80% for the sixth century. Conversely, it is

[226] Given that the ceramics from those areas were the discarded materials of previous excavations and so lack chronological value, they will not be considered in this work.

[227] In fact, it is common to find large quantities of ceramics in these large fills: generally residual ceramics dated to classical period are very common in Rome, but this thesis shows that it is not always true. See below, Chapter 7.

clear that the ceramics contemporary to the use of the area are less numerous when the area itself was more used: as a consequence, we have more ceramics dated to the first centuries of the Empire in the late Antique layers, when the first fills were made, than in those of the period before AD 200.

In general, the situation explained above is true for the recent excavations in Areas 1 and 2 as well. The level of conservation of the ceramics from these areas is good enough but, by contrast, just a few complete vessels have been found. These areas generated thousands of sherds, which can be generally dated between first and seventeenth century.[228] As said, excavation in Area 2 is not complete, being still at the c. AD 1050 to c. 1250 level. In this area three small hearths have been found, all dated to the eleventh century, and most likely related to food preparation.[229] This suggests the presence of dwellings nearby or at least demonstrates that this area was not part of a garden during that period, contrary to the general opinion that the area of the *Templum Pacis* was already occupied by vegetable gardens during that period. The latest excavations have indeed demonstrated that, during the eleventh and the twelfth centuries, the *Templum Pacis* was affected by significant spoliations, in order to reuse the ancient materials. Here, we should consider the possibility that this area was being used in different ways, such as for some kind of food processing. However, at the moment it is not possible to trace dwellings in this specific area, because of both the use of perishable materials, such as wood for building, and the complexity of the stratigraphy. Potentially, excavation of the rest of Area 2 will enrich our understanding of this part of the *Templum Pacis*. But its ceramics, yet to be analysed, will not be considered here.

[228] The total count for these areas has not been completed yet, and this preliminary information comes from my preliminary analysis done during the excavations.

[229] These hearths were studied for a thesis in 2015: L. Giovacchini, *Un contesto ceramico dallo scavo del Templum Pacis: analisi e quantificazione*, BA thesis, 2014-2015, Università degli Studi di Roma Tre. On that occasion, the aim was to analyse the use of the Area 2 during the tenth century. Unfortunately, the excavation of that area is still incomplete.

4.6.1 – The Archaeological Layout of the Vicus ad Carinas

The *Vicus ad Carinas* (so-called Area 5) is totally different, being an ancient street, whose first phases were Roman, but which endured into the Middle Ages.[230] The stratigraphy is quite complex and at the moment the excavation is still working on tenth-century levels, as shown by the ceramics. In the latest archaeological campaign, remains of some kind of structures that occupied part of the street itself have been found (Fig. 27).

Figure 27: *Vicus ad Carinas* during the recent excavations in September 2017. (Source: G. Giovannetti.)

The excavation of the street ran from September 2015 until November 2017, with analyses of data taking place in winter seasons. Given that the aim of the *Parco Archeologico del Colosseo* is to reopen this road to the public, as a new access line to

[230] See above, on the *Vicus ad Carinas*. In addition, part of the excavations in *Vicus ad Carinas* (during the same occasion of the excavations for the Great Jubilee) were studied for a MA thesis: M. Fadda, *Vicus ad Carinas: Analisi ed Interpretazione dei Dati di Scavo*, 2014-2015, Università degli Studi di Roma Tre.

the Roman Forum, the excavations have been suspended, and the data here presented are thus the last from the excavation.[231]

In general, the in-phase ceramics from the layers of the medieval street can be mostly dated to the tenth to the eleventh century, but obviously this does not exclude the presence of residual and intrusive ceramics (see Chapter 6). The burials mentioned earlier (pp. 65-67) are characterised by the presence of few datable ceramics, but they could be assigned to a thirteenth-to fourteenth-century phase, during which period use of the street had ceased. In general, the archaeological layers are thin, and, as a consequence, the sherds coming from this area are very small as well, as we should expect from the layers of a street. In fact, the layers of this area are the result of various functional repairs to the use of the street, instead of being huge fills as for the previous areas, and consequently size and quality of the finds from them are totally different in comparison with the ones from Area 1 and Area 2.

In total, the excavation of the *Vicus ad Carinas* generated **14,676 sherds**, generally dated between the classical period and the Renaissance, but these are not the actual chronological limits of the archaeological layers. In fact, the classical ceramics can be considered as residual: again, typically, the percentage of the residuals is really high (almost 90%). By contrast, the Renaissance wares are few (less than 0.1%), and looking at the position of layers they could be considered as intrusive. The medieval sherds are not the most numerous (c. 4%), but, as we will see, they do constitute the in-phase assemblage of this site. In addition, we must bear in mind that part of the supposedly ancient common and cooking ware might be medieval. In fact, given that most of the finds are body sherds, it is not always possible to distinguish

[231] While the excavation in the area of the *Vicus* is finished, during September 2018 one ancient *taberna* facing it started to be excavated. At the moment (Fall 2018), this excavation has returned a tenth-century assemblage, characterised by new types unknown for medieval repertoire. This ceramic assemblage has not been studied yet, thus our information is absolutely preliminary.

between ancient and medieval ones. Superficially, while medieval common ware is itself small in quantity (less than 0.1%), there is no medieval cooking ware at all. Having studied the whole assemblage, this is not the case, but still, it is difficult to demonstrate the certainty of any distinction between ancient and medieval, while it is crucial, for this work, to be as reliable as possible.

4.6.2 – The Ceramics from the Vicus ad Carinas

Here, the residual ceramics consist of the ancient classes: amphorae, fine wares, cooking ware and common ware. Their chronologies are very wide, including sherds dated to the Imperial period and Late Antiquity, as evident in looking at the amphorae: here are several different productions dated from the first century AD to the sixth century, such as African and Aegean amphorae.[232] Their level of conservation is good, but we have no complete vessel, and even the diagnostic parts are limited. Similar results come from the ancient fine wares. Here, I have included several classes with different chronologies, but all of them are clearly residual in this site, such as painted common ware, thin ware, black ware, both Italic and African *sigillata* (Red Slip Ware), and African Cooking Ware.[233] Moreover, there are sherds of lamps whose chronological range is really wide. Despite the presence of so many different classes, the amount of fine wares is still as much as we might expect (a bit more than 5%), as, in general, residual ancient fine wares are always lower than amphorae and coarse wares of the same period.

As for Cooking Ware and Common Ware, both are present in higher percentages (10% and almost 8%), but, as said, they include the medieval sherds.[234] In particular, for this class most of the studied rims were originally parts of lids, and almost 30 sherds of lids have been found so far more than half of the total of the cooking ware

[232] See Bertoldi, *Guida alle anfore romane*.
[233] See Olcese, *Ceramiche comuni*.
[234] For the residual Common Wares see Saguì, 'Il deposito della *Crypta Balbi*'.

rims. In this case, we are talking about the typical classical and late-antique lid, characterised by convex shape and apical handle. We know that this kind of lid was used almost without interruption from the classical period to the tenth century, and only during the late twelfth century was this shape changed. It is thus significant that from the layers excavated in the *Vicus* we do not have this later form.

Moreover, some *olle* have been recognised, but while some of them are surely medieval, others could be late-antique or even classical: the main issue is that there are still few comparative sites for the period between the seventh and tenth century in and around Rome, thus types and chronologies of this form are still not clearly understood. In addition, as seen earlier - and this is true for the common ware as well, given that cooking ware is a utilitarian class - forms were often used for centuries without the need to change, because they were functional as they were. The ideal would be a chronologically reliable site, with no residual pottery, full of these kinds of common wares. In the site here analysed, unfortunately, it has not been possible to create a typology for the lids, given the small size of the preserved part. Where the rims could be analysed, they appear to be partly ancient, partly late antique, and partly generally dated between the eighth and tenth century. Some are in fact the same kinds of types analysed for S. Cornelia by David Whitehouse, and dated to ninth/tenth century,[235] while some others are residual, and even the distinction between them is not as clear as we would like. Overall, especially during the eighth and the ninth century, people continued to use the same basic forms they were using before, and this really complicates our understanding.

The diagnostic parts of the Common Ware finds are fewer, and almost all the rims found are late antique. However, for this class it is easier to distinguish classical and medieval body sherds: generally medieval ones are characterised by a smooth and

[235] See note 48.

clear external surface, and extremely purified clay – the so-called *acroma depurata*. Most of the forms are related to food storage: during the Late Antique period, it is common to have amphorae, basins and jars, while, from the eleventh century until the end of the twelfth century the main form produced is the amphora, in different sizes (Fig. 4). As a result, the assumption is that during the Middle Ages plates and bowls were no longer used; but this is not likely, and instead, the everyday set was no doubt completed by wooden or metal vessels, which are not preserved, influencing this apparent absence of the huge variety of forms that characterised the previous centuries. Moreover, common wares could be decorated, either with parallel combed lines, or red painted decorations. In particular, only one sherd in Area 5 shows the red painted decoration typical of the Early Middle Ages.[236]

As just analysed, both cooking and common wares create some issues in recognition, at least for the ceramics from the archaeological layers of the *Vicus*, because they are scarce and fragmented. Furthermore, from late Antiquity into the early Middle Ages we see a dramatic drop in the variety of the ceramics forms produced, with, for example, "open" vessels apparently no longer produced. Thus, while coarse wares are very few and often with an imprecise chronological range for dating our site, the classes that are key are, obviously, the fine wares.

With respect to medieval fine wares, the layers have returned sherds of the following classes (Tab. 5; Fig. 46, based on sherd count and Fig. 47, based on weights): Forum Ware (404 frags. - 2.75%), Sparse Glazed ware (72 frags. – 0.49%), Archaic Majolica (3 frags. – 0.02%), Green Glazed ware (1 frag. – 0.01%) and Renaissance Majolica (1 frag. – 0.01%). Given that we are analysing the tenth-century phase, it is obvious that not all of them can be considered to be in phase, and even the difference between Forum Ware and Sparse Glazed Ware needs to be clarified.

[236] See M. Ricci, 'Ceramica dipinta in rosso', in *Crypta Balbi 5*, a, pp. 308–313.

First of all, the single sherd of Renaissance Majolica, dated to the fifteenth century, is clearly an intrusive sherd that, most likely, comes from upper layers, as confirmed by the position of the archaeological layer in which it was found, since it was in a layer on the border of the area excavated. Green Glazed ware and Archaic Majolica, dated between c.1200 and c.1450, come from the layers related to the already-mentioned burials that lined the road during the late Middle Ages, so they are in-phase as regards the burials, but they do not date the *Vicus* itself.[237] As a consequence, the chronology of the archaeological layers of this phase of *Vicus ad Carinas* must be based on Forum Ware and Sparse Glazed Ware, generally dated between the early ninth and the late twelfth century; these two classes can be considered the progressive evolution of the same way of covering the surface of a pot: while the first production is characterised by a thick and shiny glazed surface that covered the whole pot, later this same glazed surface is scarce and will cover just some specific parts, but the process of production is basically the same. So, when we are considering just the un-diagnostic parts, such as the walls, the distinction between the late production of Forum Ware and the first production of Sparse Glazed Ware is often difficult to see. Furthermore, the latest production of Forum Ware overlaps with the first production of Sparse Glazed, between the end of the tenth century and the start of the eleventh century.

At Area 5, the medieval fine wares assemblage shows this passage between the two main productions, thus the layers can be dated to c.950-c.1050: most of the Forum Ware is dated to the end of the tenth century, while the Sparse Glazed sherds are clearly part of the first production of the start of the eleventh century. In particular, the analysis of the few sparse glazed sherds has confirmed that they are part of the so-called "transitional" production. Moreover, most are body sherds, thus their

[237] See A. Molinari, 'Le ceramiche rivestite bassomedievali', in *Crypta Balbi 5*, pp. 357–484.

identification is strictly related to the level of preservation, in fact, we have seen that often recognising a production depending just on the un-diagnostic parts can be difficult, and the quality of the sherds is not that good in these layers.

Regarding Forum Ware, there are just 7 rims in our assemblage, and most of them are parts of jugs. Their types can be compared to ones from *Crypta Balbi*. In addition, some handles are evident, characterised both by a thick and shiny glazed surface, and by the typical petal decoration, whose application is typical of the mid-tenth century. Furthermore, the same assumptions can be made regarding some body sherds. Unlike the common and the cooking wares, it is often possible to date the body sherds because of the quality of the glazed surface or with the presence of decorations, even if these are not normally considered as diagnostic parts. The presence of other forms than the jug, such as small lids/lamps confirms that the assemblage here analysed is still part of the tenth century production. During the first half of the eleventh century most of the ceramics set reduced drastically, and the only form produced was the jug. The reduction in forms is not at all related to a technical regression, because it happened contemporary to an improvement of quality of the fabrics, thus there was no more need of the waterproofing function of the glazed surfaces. Such an improvement clearly relates to an improvement in the specialisation of the potters, who steadily started to produce high-level standardised ceramics more typical of the late Middle Ages. And, despite the general scarcity of rims, the chronology of this assemblage surely points to the end of the tenth century up to the first half of the eleventh century, because all the main features of this assemblage indicates such a chronology. In addition, it is important to stress the between the glazed rims and the cooking-ware rims: this means that the glazed rims, which can be dated to c.950-c.1050, also date some of the cooking-ware rims. Given that, even though some of them are surely residual, our assemblage demonstrates the continuity of the use of some specific forms, such as the lids, through the early Middle Ages. This connection should not be underestimated, given the general

scarcity of information about cooking wares used in the centuries between the seventh and tenth century.

Overall, the medieval evidence from *Vicus ad Carinas* is quite limited: one possible reason for this is the continuity of use of some forms. In fact, whenever there was no need to change some functional objects, people kept using them and producing them in the same way, and obviously this affects how we can recognise such objects as medieval rather than late antique. At the same time, this continuity of use must be seen as a kind of cessation in technical progress, at least during the period here analysed, because it means that there were no major social and/or economic changes that influenced daily habits and productions. While these major economic transformations will be analysed in Conclusions, for now it is key to underline the coherence of the chronology of this ceramic assemblage, because it helps to define the phases of this medieval road. In fact, while at the start of the very first archaeological campaign the idea was to reach the late antique layers, the complete analysis of the finds has totally changed that. The analysis of the stratigraphy, still underway, has found at least three phases, characterised by different uses of the *Vicus* or, at least, of the structures that overlooked the street.

First, there is the archaeological evidence of a structure, whose function is still unknown (Phase 1). Then, after a temporary blockage of the street itself (Phase 2), confirmed by the presence of a rough wall, there are some remains of a second structure (Phase 3), which partially occupied part of the *Vicus*, but little more can be said yet.[238] The ceramics from the layers associated with these structures has been analysed, but cannot precisely define the chronology of these phases. In general, the layers of the *Vicus* appear to be dated between c.950 and c.1050 but unfortunately the actual layers from the structures have returned very few diagnostic parts.

[238] The stratigraphic analysis is on-going.

Nevertheless, it has been possible to recognise that the structures were, most likely, related to some kind of manufacturing activity: while the ceramics could add detail, the analysis of the metalwork, the glass, and their wastes, still underway, implies glass production; this is significant, as we do not have archaeological evidence of glass production in Rome between tenth and eleventh century. In this sense, some of the unidentified sherds (0.12%, Fig. 28 and Fig. 29) have been identified as crucibles or work ceramics, used during some kind of production process.

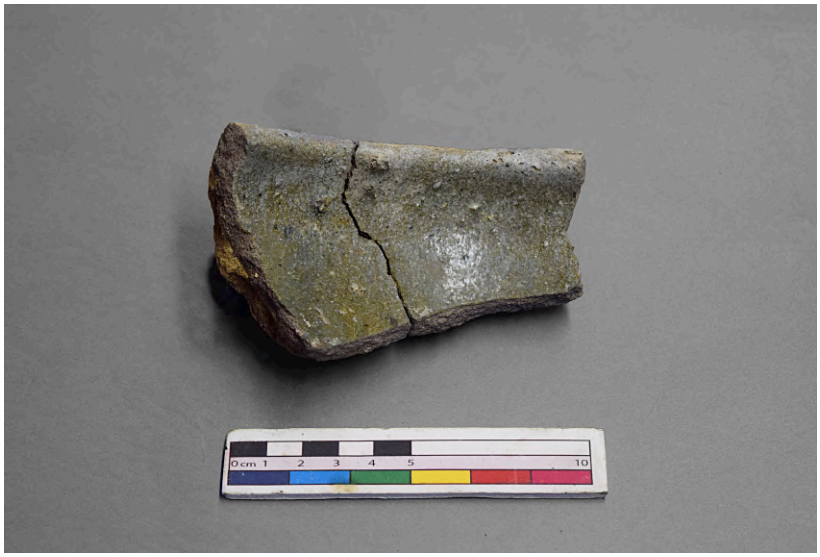

Figure 28: Crucible found in the *Vicus ad Carinas*, dated to the tenth century. (Source: G. Giovannetti).

Figure 29: Crucible found in the *Vicus ad Carinas*, dated to the tenth century. (Source: G. Giovannetti).

In particular, one resembles a find from the *Crypta Balbi* dated to the tenth or eleventh century: it is a kind of coarse bowl with the internal side covered by a non-intentional glazed surface, meaning that the glazed surface is totally different from the glazing done for fine wares, and thus probably not something intentionally created for the vessel itself, while it is likely that such glazed surface is related to glass production.[239] While further analysis of the stratigraphy is still necessary, clear is the importance of what this latest excavation can add to understanding of the general layout of this area between the tenth and the eleventh century.

Certainly, the chronology of the *Vicus* site is important because relates to wider discussion of the continuity of use of some specific ancient streets through medieval and modern period. For example, from the recent excavations at Piazza Venezia, we can identify some ancient *tabernae* overlooking the initial part of *via Lata*, corresponding to the modern *Via del Corso*.[240] During the second half of the ninth century, a massive earthquake caused the destruction and the abandonment of these *tabernae*, creating a unique archaeological context. Fortunately, all the finds were sealed by the earthquake itself, and nowadays the ceramic assemblage, dated to the first half of the ninth century, is a 'landmark' for the analysis of the ninth-century wares. In particular, Forum Ware from this site cannot really be compared to the *Vicus ad Carinas* assemblage, for it constitutes the earliest, not the latest, production of the type, but on the other hand it is valuable for the analysis of the typical features of the sherds found in road-layers. As Ilaria De Luca[241] clearly explains, while the ceramics found inside the *tabernae* are characterised by their exceptionally good condition, with many almost whole vessels, by contrast the sherds found in the archaeological layers of the *via Lata* are totally different: few in number and very

[239] L. Saguì, B. Lepri, 'La produzione del vetro a Roma: continuità e discontinuità fra Tardo Antico e Alto Medioevo', in *L'archeologia della produzione a Roma (secoli V-XV)*, pp. 225-242.
[240] See Serlorenzi-De Luca, 'Piazza Venezia. Indagini archeologiche della metropolitana', pp. 495-520.
[241] Ibid.

small. In addition, the percentage of residual ceramics from the actual road is quite high, with classical amphorae amounting to 56% of total sherds, excluding the residual classes. The difference with the ratio of the classes from the internal layers is substantial: there, the amphorae are just 28%, and even totalling up the other classes the residual sherds reach more than 50%. As analysed above, the dominance of amphorae relative to the other classes is a feature of our *Vicus* assemblage, and this is something common in all those similar road sites. Most likely, it indicates that road maintenance continuously required building materials, which will have been easy to find; this means that between ninth and eleventh century ancient amphorae were still common enough to find, and so were massively reused as building material.

Furthermore, from the analysis of the medieval reuse of ancient roads, we gain other kinds of information regarding the techniques of road maintenance. In fact, it is clear that, during the Middle Ages, amphorae were used to prepare the road surface, which were mainly composed of a mixture of small materials, such as ceramic sherds, pieces of bricks, marble, and even animal bones. Probably, in the city there were specific places where these kinds of building materials were prepared and sold. For example, this could even be true for some undefined workshops found in the area of Monte Testaccio[242] quite recently, probably working continuously from the fourth to the eighteenth century. In fact, the continuous use of Rome's roads required continuous maintenance, and that would have been impossible without specific places where to be provided with the building materials. This is absolutely true for the context of *Vicus ad Carinas*, where over a hundred layers have been excavated, most of which are the kind of maintenance repairs just mentioned.

Another important example of continuous use of a street is *Vicus Iugarius* which, despite not being mentioned in the Einsiedeln Itinerary, was another entrance to the

[242] See Meneghini, 'Le Strade di Roma'.

Roman Forum, passing along the shoulder of the Capitolium Hill (Fig. 18).[243] This part of the city was also deeply affected by the Fascist demolitions of the first half of the twentieth century. In addition, the initial part of *Vicus Iugarius* inside the Forum had already been partially excavated at the end of the nineteenth century, when archaeologists started the very first excavations in Roman Forum: already on that occasion, most of both the post-ancient layers and remains were definitely lost. Nevertheless, in the 1980s the latest excavations in the north-west part of the Roman Forum took place, and it partially affected *Vicus Iugarius* as well, in its initial part inside the Roman Forum. Such excavation reached just the twelfth century levels but the ceramics are only partly published. However, the presence of archaeological layers dated from ancient to modern period is clear, thus demonstrating the uninterrupted use of this road. In addition, the description of the road's layers is clear about few and small sherds found in these. As in the case of *Via Lata* analysed above, some dwellings, partially traced during the excavations, overlooked the road itself, and at least one of those dwellings extended onto part of the road, something confirmed by the written sources talking about different structures (i.e. balconies and porticoes) that used to obstruct the roads during the Middle Ages.[244]At least one of these dwellings was similar to the *domus solaratae* found in the Forum of Nerva. So, it is clear that *Vicus ad Carinas* shares many features with other medieval roads excavated in Rome.

In summary, the analysis of the ceramics from the *Vicus ad Carinas* (Area 5) has demonstrated various phases of reuse of this road, including between the second half of the tenth century and the first half of the eleventh century. Moreover, the features of the ceramics are homogeneous with the image from other medieval roads excavated within the city. Unfortunately, most of the archaeological data from those

[243] See Saguì, note 'La circolazione delle merci'.

[244] Some remains of these medieval layouts are still visible in some areas of the modern city, i.e. Trastevere.

medieval roads are limited, and often the findings not extensively published, so it is difficult to compare different sites. That said, the stratigraphy is mostly very similar, showing almost the same features, and generally finds are always described as a heterogeneous mix of very small materials presenting different signs of use. Finally, another typical feature of this kind of layers is to find horseshoes; one was also found in the excavations at *Vicus ad Carinas*. Obviously, further archaeological analysis is crucial in order to define the functions of the structures found during the latest excavations at the *Templum Pacis*, especially beside the road, and their periods of use.

4.7 – *Vicus ad Carinas*, Road Layouts, and Tenth-century Rome

As discussed, the latest excavations in the area of *Templum Pacis* have affected the area of *Vicus ad Carinas* as well, revealing an unexpected tenth to eleventh century layout, and demonstrating that this road continued to be used across the centuries, as it was an important passage to and from Roman Forum. At the same time, it was almost parallel to another really important medieval road, the former *Argiletum*, passing through the Forum of Nerva. As seen in Section 4.3, for now, it is clear that the peak in the use of this passage was during the tenth century, that is to say, contemporary to the use of the dwellings in both the Forum of Caesar and the Forum of Nerva (Figs. 20 and 22).

Despite the paucity of the medieval excavations in Rome dated between the ninth and the tenth century, the available archaeological data promotes an optimistic view of the city, albeit with a lower population density and a modified economy comparative to earlier periods.[245] In particular, from the examples analysed above we

[245] See N. Christie, *From Constantine to Charlemagne: An Archaeology of Italy, AD 300-800*, Ashgate, Aldershot, 2006, pp. 183-281 and C. Wickham, 'The Romans according to their malign custom: Rome in Italy in the late ninth and tenth century', in Smith, *Early Medieval Rome and the Christian West,* pp. 151-167.

have seen that ceramic production in the tenth century was characterised by rich variety of decoration, and the quality of coatings is high. While, on the one hand, the forms produced during that period were few, on the other hand, this is a proof of the presence of various artisans working in the city in order to supply the demand of daily objects, including glass. We must of course bear in mind that Rome in that period was the papal city: the *Liber Pontificalis*, commenting on both the papal donations and restorations, gives a similarly positive picture of the city.[246] Even the attention to continuously repair roads seems a good sign of a dynamic city: the same roads were crucial for moving all the reusable materials collected from the ancient monuments and literally spread around the whole city. In fact, as Roberto Meneghini has recently argued, the main reason for a street was – and still is - its function, thus it is obvious that in a period during which the city was particularly vital, it was important to be actually able to move through it. And yet, even the quality of the medieval streets themselves, generally artificial compositions made with a selection of different building materials, rather than the ancient polygonal blocks (*basoli*), makes sense related to the continuous passage of animals, which walk more easily on such beaten earth floors, and which most likely were massively used in a period of general reorganisation of the city, such as the tenth century.[247]

In addition, the quality of medieval roads until now has been underestimated, since in order to create the medieval streets, at least the main ones, there needed to be a certain level of accuracy, overlapping different kinds of layers – as we have seen from the examples above. In fact, the roadbed was mostly made of larger rubble, in order to distribute the load, then there was a layer of lime, of which often we can see the remains on the archaeological finds. Finally, the top layer was the actual beaten

[246] See Goodson, *The Rome of Pope Paschal I*; Noble, 'Paradoxes and possibilities', pp. 55-84. Helen Patterson hypothesizes something similar based on the pottery findings, see: Patterson, 'Un aspetto dell'economia di Roma'.

[247] It is important to remember that the medieval city is characterised by this cohabitation of people and animals, without a real division of space.

earth surface, often made of small fragments of ceramics, bones or bricks, which were especially selected for this use. Moreover, instead of having the so-called "donkey's back" profile, the medieval streets were characterised by their typical concave shape, and the sides of such streets were plenty of plants, as tidily confirmed by the huge numbers of remains of snails in those side-layers of the street.[248] However, it is crucial to stress that the previous ancient streets were not totally destroyed, but often the blocks were continuously used, and it is still possible to see that from the ruts of the wagon wheels often found in this kind of site.[249] In particular, at *Vicus ad Carinas* as well on some of the original ancient blocks still *in situ* there are medieval wheel ruts, as the different orientation of them in relation to the original ancient route confirms. In addition, a fragment of marble was used in the layers of *Vicus ad Carinas* in order to adjust the pavement, while a huge travertine corbel is still in the middle of the un-excavated tenth century layers, whose provenance is still uncertain, but most likely it is from Forum of Caesar (Fig. 30).[250] Such reuse of marble and travertine that were taken from areas nearby is further evidence of the vitality of the city during this period as there was a full reuse of both sites and materials.

[248] For information on on-going study of the animal bones, I thank my colleague Luca Brancazi.

[249] Similar signs have been found in all the medieval streets analysed above.

[250] The study of the marble from the recent archaeological excavations will be done by Alessandro Mortera, who provided this preliminary information.

Figure 30: Travertine corbel from *Vicus ad Carinas*. (Source: G. Giovannetti)

Regarding the archaeological evidence for structures alongside the road, on the one hand it has not been possible, yet, to identify them – it must be said that they are more the "negative" layers of structures than actual walls or parts of a building – but on the other hand they are likely to be related to productive activities. As we will discuss more in detail later (Conclusion), the sites of production in medieval Rome is one focus of current study, given that if the medieval sites in the city are few, the remains of specific production sites are even fewer. In fact, as discussed during a 2014 conference on post-classical productions of Rome, the differences between the ancient and the medieval city were immediately clear: the medieval picture is scattered, and still it has not been possible to find actual production places.[251] For example, regarding the ceramics all the production discards found in the latest excavations in the area of the city centre have been counted and analysed, creating some useful maps of their distribution (Figs. 31 and 32): the area of the Fora actually yielded most of this archaeological evidence, but we lack any actual kiln.[252]

[251] See Molinari *et al.*, *L'archeologia della produzione a Roma*.

[252] See G. Rascaglia, J. Russo, 'La ceramica medievale di Roma: organizzazione produttiva e mercati (VIII-XV secolo)', in Molinari *et al.*, *L'archeologia della produzione a Roma*, pp. 279-308.

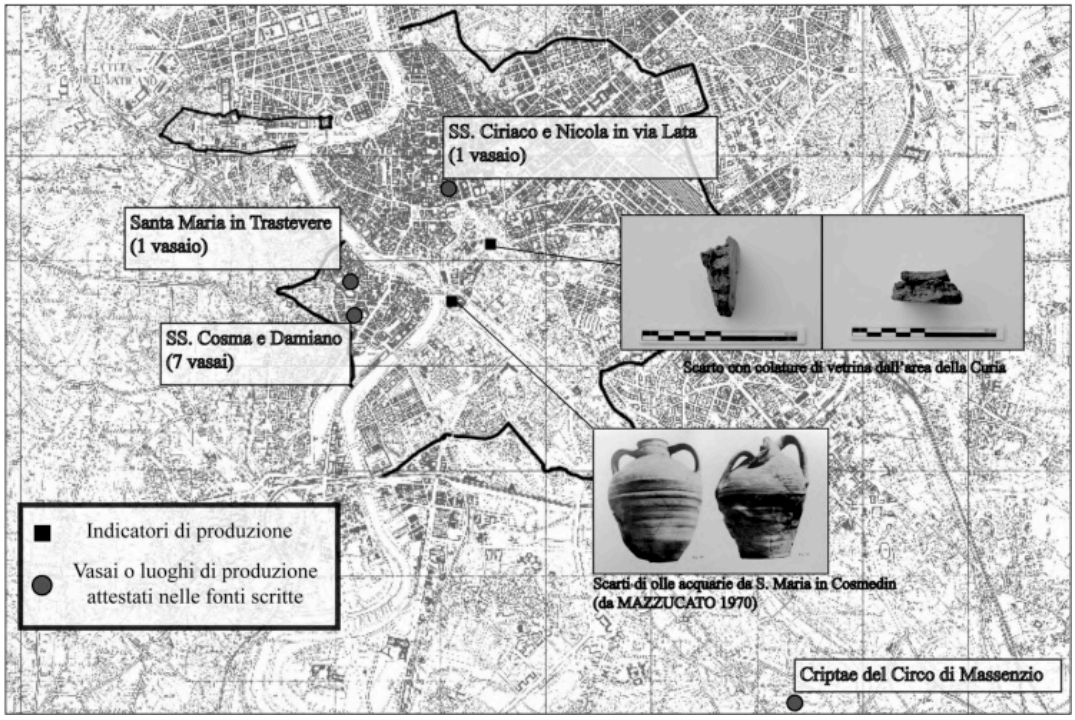

Figure 31: Distribution of potters before the twelfth century, based on both written sources and archaeological evidence. (Source Rascaglia-Russo 2015, Fig. 1, p. 192)

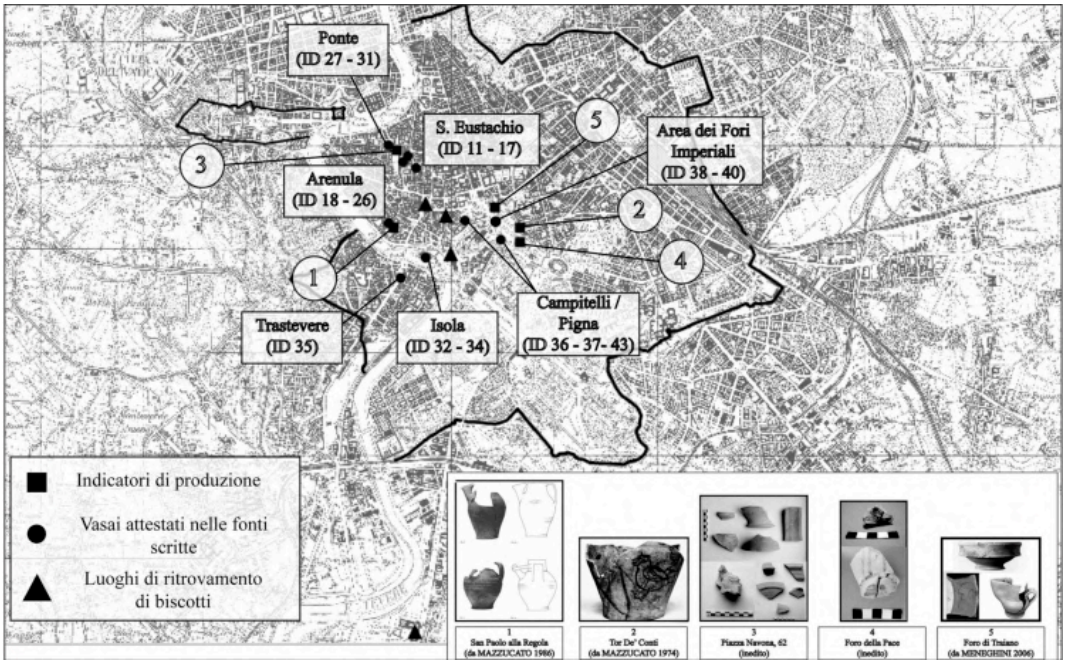

Figure 32: Distribution of potters in fourteenth and fifteenth centuries, based on both written sources and archaeological evidence. (Source Rascaglia-Russo 2015, Fig. 2, p. 194)

As a consequence, the initial hypothesis made during the excavation that labelled the structures of *Vicus ad Carinas* as the place of a ceramic kiln was erroneous. However, we still know so little about the production places for this period that it is possible

that this will change again. However, as mentioned, the large amount of glass, and crucibles possibly related to it, do suggest some kind of glass production site, or at least involved into some phases of this process, rather than the place of a ceramics kiln. This is especially interesting considering that the *Vicus ad Carinas*, despite still being used during the tenth and the eleventh century, was apparently not one of the main roads, as suggested by its absence from the Einsiedeln Itinerary.

Or is this absence related to the **function** of this road instead of its importance? As observed, the Einsiedeln Itinerary was most likely created as a kind of virtual map of the city, but obviously one of its aims was to show, in some senses, Rome's main buildings, whether churches or ancient ruins.[253] While it is clear that only the main roads having such functions are in the itinerary, at the same time, it is likely that all the other roads still used in that period, simply because they are not mentioned in such a specific itinerary related to the so-called *mirabilia*, were important for other roles than the religious or ancient buildings around them. Probably, they linked artisan quarters, which were of no interest for pilgrims: looking at the itineraries, some areas of the city apparently lack these main roads, but it does not necessarily mean that the same areas were not as inhabited than others. For example, just one main itinerary is shown passing through the area of Trastevere (seventh itinerary, identified as *a porta Aurelia usque a portam Praenestinam*), and yet during the Middle Ages this is one of the places known from the written sources as one of the most populated area and as the potters' quarter as well.[254] By contrast, some other parts of the city are obviously full of itineraries passing through them, such as around St. Peter's (Vatican).

Citing just these two examples, clearly the layout of the city must have been more complex than it looks from the scarce archaeological evidence, and, most likely,

[253] See note 109.
[254] See Wickham, *Medieval Rome*, pp.144–145.

different parts of the city were characterised by different kinds of roads. In particular, the functional division of spaces lucidly explained by Riccardo Santangeli Valenzani describing the different "paths" inside the structure of the *domus solarata*, can be applied to the city's itineraries as well. In fact, Santangeli has hypothesised that the *domus solaratae* were organised in order to create two different access lines, another for those living upstairs, one for who was living downstairs. These two "itineraries" within the same building never really met, thus creating different ways, each one related to different parts (and functions) of the house.[255] Similarly, it is fascinating to hypothesise that some roads were intended for the purpose of tourism through the city, while others were served as routes for the production and sale of the resources; possibly, we could imagine a map with different itineraries, each one related to a different function of the medieval city.

It is therefore possible to say that, although the population dropped dramatically from the third to the tenth century, apparently the city was still organised and full of people, who readapted the space to their new needs. Furthermore, recently several scholars have tried to point out the positive signs of Roman early medieval economy. For example, Thomas F. X. Noble has shown not only how much the popes were interested in restoration projects, but also revealed who actually worked on these projects. He noticed how some kinds of project demanded great expertise, for example re-roofing basilicas, whereas other projects were simpler, such as the restoration of walls. Noble also uses information from *Liber Pontificalis* for pointing out that, contrary to some approaches, Rome was prosperous: simply the number of workers needed for all projects around the city proves that. There were both unskilled and skilled workers, but unfortunately, our sources are not clear in defining them: there appears to be a sort of "master", and in some popes' lives some "loyal men" are mentioned, but nothing more. So, Noble has tried to link the

[255] See note 172.

unskilled workers to the general economic situation that characterised Rome during the eighth and ninth centuries. During this period, construction, at least under the popes, does not seem to drop off dramatically.[256] By contrast, restorations suppose the presence of both skilled and unskilled labourers, and, more generally, a vital city.

Similar assumptions can be made for ceramic productions as well: in particular, during the period outlined by the excavation in *Vicus ad Carinas*, we may view a progressive specialisation of the potters, most likely already organised into ateliers that produced specific forms and classes. Moreover, the high level of medieval Roman production is confirmed as well by the stability and the quantity of ceramics produced. In fact, classes and forms remained almost unchanged until the late twelfth century, with a strong pottery tradition. By contrast, De Luca has recently hypothesised that Forum Ware and cooking wares were produced by the same atelier, and this is likely to justify the presence of glazed spots on the surface of some cooking wares, as she analysed for the case of the medieval wares from *via Lata*, dated to the ninth and tenth centuries:[257] it is clear that further research is needed. However, as mentioned above, the fine wares from *Vicus ad Carinas* show exactly the passage between Forum Ware and Sparse Glazed Ware productions by the end of the tenth century, when the improvement of the clay quality used for the vessels caused the progressive decrease of the glazed surfaces.

Both the ceramics from the *Vicus ad Carinas* and from other medieval streets excavated in the area of Rome point to a vibrant city. As a consequence, depending on the available archaeological evidence, the scattered medieval layout of the city can be rethought.

Obviously, this does not change the general character of the medieval city: it is absolutely true that the medieval dwellings were not the same as the ancient ones,

[256] See Noble, 'Paradoxes and possibilities, pp. 55-84.
[257] See note 74.

being constructed very simply, with most of the materials from previous Roman buildings. Moreover, we have to recognise Rome's importance as a place of interest to people from outside Italy: as nowadays, many thousands of pilgrims travelled to Rome to visit martyrs' graves and the very heart of Western Christianity, St. Peter's. It must be stressed that, regardless of exactly how large it was, Rome remained one of the largest settlements in Latin Europe, and in our final chapter we will discuss this issue in more detail. Here, we must bear in mind that Rome remained the most populated western city until the twelfth century.

At the same time, we still lack information about artisans and production sites in Rome before the Late Middle Ages: for example, we have seen that the archaeological excavations in the city have so far not identified any kilns. This is in stark contrast with all the specialised artisans mentioned in the written sources, and is extraordinary because of its early date in comparison with all the other Italian cities.[258] By contrast, the area of the Imperial Fora was associated in the few written sources with the presence of particular trades between the tenth and eleventh century, while apparently in that area it has been possible to recognise some of the birthplaces of popes – thanks to the information of *Liber Pontificalis*.[259] Later, however, this same area is known from the written sources for being the place of at least two potters' workshops in the fifteenth and the sixteenth century. Clearly the use of the ancient heart of the city as a residential area had probably already started during the tenth and eleventh century, well before the massive urban development of the late Middle Ages; but it is not possible yet to confirm the presence of ceramics kilns in the same area. Nonetheless, these developments deeply changed the layout of Rome during the tenth century, affecting the area of Imperial Fora as well and showing a lot more of aspects than the too simplified succession between the inhabited and uninhabited spaces, first articulated by Krautheimer in 1980s:

[258] See Lori Sanfilippo, *La Roma dei Romani*; Wickham, *Medieval Rome*, pp. 137-155.
[259] See Wickham, *Medieval Rome*, pp. 113-137.

medieval Rome as a series of rural villages, interrupted by large and almost abandoned areas.[260] In this sense, the latest excavations at *Vicus ad Carinas* confirm the complexity of tenth-century Rome, given that they are the archaeological proof of the existence of both a greater variety of people living in the city, and different internal itineraries having different functions.

In terms of houses, the upper class level dwellings seem to be close to lower level ones, shops and production sites were connected, and huge amounts of ancient materials were transported along the streets, continuously repaired for serving the city. The most important streets were occupied by prestigious buildings, such as the case of the *Argiletum*, while other streets saw commercial activities. This kind of mixed use is typical of the late medieval city[261], and it is not generally surprising: as Wickham[262] says, Rome is unique because of the early date of this vibrant layout, which pertains to all its aspects, such as the monumental façade of the buildings, and the production of something as specific as Forum Ware.

[260] Clearly, such an over-simplified division has been overturned by the results of recent archaeological excavations.
[261] See Meneghini-Santangeli, *Roma nell'Altomedioevo*.
[262] See Wickham, *Medieval Rome*, pp. 23-59.

Chapter 5
Central Medieval Rome and the Colosseum

5.1 – Introduction

Vicus ad Carinas was progressively abandoned from the end of the eleventh century onwards. In general, it is crucial to stress that archaeological sites in Rome dated to the twelfth and thirteenth century are fewer than expected, and most of our current archaeological evidence comes once more from *Crypta Balbi*. However, due to the continuous rearrangement for tourism, the area of Colosseum has seen several excavations during the last twenty years, some more regular than others. Fortunately, in these, it has been possible to find and analyse several contexts dated between c.1180-c.1250, which are extremely important for the history of both the site and the city – as we will examine in this chapter. This chapter will be composed of a brief introduction about the structure and the history of the Colosseum (Section 5.2); then, I will analyse all the excavations carried out inside it, and the ceramic evidence that they produced (Section 5.3); finally ceramics from *Cuneo IX* and *X* will be presented (Sections 5.4-5.7).

5.2 - The History and the Written Sources

5.2.1 – Structure of the Colosseum

As known, the Colosseum was inaugurated in AD 80 in a valley that occupies the area between Esquiline and Caelian Hills. Being built by the Flavian Emperors, the building is also known as the Flavian Amphitheatre, despite "Colosseum" being probably the most common name.

The Colosseum has an oval shape (188 x156 m), and the external part is divided into four levels;[263] the structure of the building was made of travertine and bricks, which is still the actual material we can see.[264] Each entrance of Colosseum defines one of the so-called *Cunei*, i.e. the long wedge-like spaces between the entrance and the arena, interrupted by corridors and resulting spaces underneath the stairs. Internally, it is divided into four concentric corridors (*ambulacri*), the southern external of which collapsed, most likely, between the seventh and twelfth century. At the centre of the building was the arena, once entirely covered by a wooden floor, which was destroyed during the post-ancient centuries.

It is clear that Colosseum, despite its simple main structure, was characterised by several internal passages that often were not connected at all: if we consider the original use of the spaces, it is possible to say that they were used horizontally, depending on the four corridors. We will see how such complexity was differently used during the Middle Ages. In general, the use of the spaces was vertical, depending on *Cunei*, and totally restructuring the connections between internal and external areas.[265] In this sense, it is important here to define the various kinds of spaces created between the corridors, in order to fully understand the changes that occurred in the Colosseum especially during Middle Ages. As explained by Rossella Rea, in almost each *cuneo*, on the ground-floor, there are some spaces that were originally underneath of the stairs. They can be divided into four main types, depending on their dimensions and shape:

- Type A, characterised by the entrance facing the second corridor and one huge trapezoidal space (48 to 60 m^2). There are 16 of these in the Colosseum;

[263] About the structure of the Colosseum see F. Coarelli, *Roma*, (Bari, 2008), pp. 198-212; R. Rea (eds.), *Rota Colisei,* pp. 170-176.

[264] See P. Pensabene, 'Elementi architettonici in marmo', in M. L. Conforto (ed.), *Anfiteatro Flavio: immagine, testimonianze, spettacoli*, (Rome, 1988), pp. 53-82; P. Pensabene, *Roma su Roma: reimpiego architettonico, recupero dell'antico e trasformazioni urbane tra il III e il XIII secolo*, (Vatican City, 2015), pp. 48-75.

[265] For the medieval transformation of the Colosseum, see Rea, *Rota Colisei,* pp. 169-176.

- Type B, made up of two rooms (the first one 28 to 36 m^2, and the second one 14 to 17.5 m^2) facing the third corridor. Often the passage between those rooms has been closed in order to reuse the spaces, as for the *Cuneo X*, and different materials have been used for separating them. There are 20 of these in the Colosseum;

- Type C, characterised by a passage for accessing the small trapezoidal room (about 21 m^2 including the access corridor); there are 8 of these, all facing the fourth corridor to the arena;

- Type D, the smallest one (14 to 17.5 m^2), having trapezoidal shape and facing the fourth corridor, as we have seen for the previous one. There are 8 of these in the Colosseum.

Due to the different shape of each of the types just analysed, we will see that the nature of their medieval reuse were totally different.

5.2.2 – Late-Antique and Medieval Colosseum

Concerning the late-antique use of the building, we know that the very first damaging event that impacted on it was a great fire in AD 217:[266] Cassius Dio tells how a lightning strike damaged the top floor, and this caused the fire and the destruction of the underground level, where parts of the top collapsed. The damages were so substantial that the Colosseum remained closed for five years, and, when Severus Alexander re-opened it in 222, the restoration works were still not finished but at least the building was usable. Despite two major earthquakes (AD 250 and 320) and some traumatic events that compromised it, such as the Gothic invasion in 410, still into the fifth century there was the will to maintain this building, as

[266] See Cassius Dio, *Storia Romana*, LXXVII, 25, 2-3.

demonstrated by several restorations done between AD 425 and 450, and, as well, the renewal of the senatorial seating in the 480s. In particular, the latest renewal under Odoacer has been defined as the "swan song" of the Colosseum, as the sixth century represents the definitive break.[267] In fact, after another major earthquake (AD 508), the structure of the monument was so seriously compromised that, instead of restoring it, the underground floor was abandoned and filled with all the ruined materials.[268] In this way, the underground was no longer usable, and this is a clear sign of the change of the kind of shows that were made in the Colosseum during this period. Afterwards, King Theodoric (Ostrogoths), who may have been opposed such violent shows, did not restore the building, and the last public games are dated to 523, as recorded in a famous letter.[269]

After that, the "ancient" life of Colosseum ends and it is very difficult to follow what happened. In fact, there is no detailed information until the eleventh century, excluding its mention in the Einsiedeln Itinerary, but the same is true for many of all the ancient monuments in the city, making this case not exceptional.[270] Certainly, the very first medieval mentions of the Colosseum are in some documents of the church of S. Maria Nova, which partly owned it. From these documents, one dated to 1038 and the other to 1061, we learn about some so-called *cryptae* inside Colosseum: one of them was sold, while the other was given as "emphyteusis" or in long-term lease. Little is known about the activities from the names of those that were involved.[271] S. Maria Nova is richer for twelfth-century documents, as six mention the Colosseum,

[267] The renewals done under Odoacer are analysed in A. Chastagnol, *Le Sénat Romain sous le Règne d'Odoacre*, (Bonn, 1966), pp. 24-56 and 57-63.
[268] The huge earthquake is mentioned in an inscription found in the Colosseum, which describes it as "*abominandi terraemotus", CIL VI*, 1716b. On the materials found in the fill of the underground level, see Rea, *Rota Colisei,* pp. 126-139.
[269] See Rea, *Rota Colisei*, pp. 36-45.
[270] See C. Hülsen, *La pianta di Roma*, pp. 29-33.
[271] For the documents regarding the Colosseum see M. Greco, 'L'insediamento medievale attraverso i dati di archivo', in Facchin-Rea-Santangeli, *Anfiteatro Flavio*, pp. 25-31; C. Wickham, *Medieval Rome*, pp. 292-305.

talking about both *cryptae* and *domus* inside it – we will discuss later these different kinds of dwellings. In addition, these documents for the first time refer to a known Roman family, called de Frasia, and Chris Wickham characterises this family as most likely part of what he defines the "medium elite". This is really important if we consider the social level of the people who possibly resided inside the Colosseum.[272] As for the kind of documents, most of them are "emphyteusis", while the ones mentioning the de Frasia family are related to a will, and some wedding gifts. Then, in the thirteenth-century documents, which only number three, a much more important medieval Roman family is mentioned: the Frangipane, named as owners of some *cryptae* in the Colosseum. The discussion about the actual presence of the Frangipane in the Colosseum is still lively as it is not precisely known, yet, which part of it they controlled. But the written sources are clear about the existence of the Frangipane's fortified palace nearby Colosseum.[273] In particular, apparently part of Colosseum was fortified as well, and a tower likely erected here. In fact, in the *Gesta Innocenti*, a biography of Innocent III dated to the early thirteenth century, fights between the Frangipane and the Annibaldi are described: Pietro Annibaldi started to build a tower opposite one of entrances to the Colosseum, and then the Frangipane – Giovanni and Raimondo's widow – tried to stop him, throwing arrows and stones at him.[274] This brief description mentions also a Frangipane tower at an entrance of the Colosseum (Fig. 33).

[272] See C. Wickham, *Medieval Rome*, pp. 261-277.

[273] See A. Delfino, 'La fortezza dei Frangipane al Colosseo: un'ipotesi ricostruttiva', in Facchin-Rea-Santangeli, *Anfiteatro Flavio*, pp. 32-51.

[274] See Anonymous, *The Deeds of Pope Innocent III*, CXXXIX-CXL, (Washington, 2004), pp. 251-254.

Figure 33: Possible reconstruction of the Frangipane *palatium* at the Colosseum. (Source: Facchin *et al*, 2018, Fig. 3, p. 306)

So, despite the archaeological absence of any kind of proof of the presence of the Frangipane palace inside the Colosseum, the scarce written sources seem clear about the connections between the Frangipane and Colosseum, which was somehow included in their fortification[275].

The same fortification is later mentioned as possession of the cited Annibaldi family, and in 1365 its remains passed to one of the Roman confraternities (Ss. Salvatore), which was in charge of maintaining and preserving the building against thieves: indeed, over the centuries, Colosseum became the ideal place for mysterious rituals, as Benvenuto Cellini tells in a famous passage.[276] At the same time, the rest of the

[275] See Vigueur, *L'altra Roma*, pp. 36-39.

[276] "*Andaticene al Colosseo, quivi paratosi il prete a mo' di negromante, si mise a disegnare i circuli in terra con le più belle cirimonie che immaginar si possa al mondo; e ci aveva fatto portare profummi preziosi e fuoco, ancora profummi cattivi. Come e' fu in ordine, fece la porta al circolo, e presoci per mano, a uno a uno ci messe drento al circulo; di poi compartì gli ufizi; dette il pintaculo in mano a quell'altro suo compagno negromante, agli altri dette la cura del fuoco per e' profumi; poi messe mano agli scongiuri. Durò questa cosa più d'una ora e mezzo; comparvero parecchie legioni (di diavoli), di modo che il Culiseo (Colosseo) era tutto pieno*"; see F. Clementi , *Il Colosseo*, (Rome, 1912), pp. 243- 244.

building was owned by the Roman *Senatus* and in charge of its effective conservation; but from the written sources we know that, already in the fourteenth century, the Colosseum was no more than a ruin, especially after the huge earthquake of 1349, and then mostly used as a quarry. Regarding the poor state of conservation, it is important to note the fierce complaint of Poggio Fiorentino against the Roman citizens, who had let such an important building as Colosseum fall apart. Finally, the same written sources mention various attempts at restoring new games in the building, but without success.[277]

5.2.3 – Modern Transformations of the Colosseum

In the eighteenth century Pope Benedict XIV decided to dedicate Colosseum to the Christian martyrs, and this was the first sign of some kind of will for the cultural preservation of the monument. In fact, since then, the archaeological and artistic value of the amphitheatre progressively has increased: first of all, Rafael Stern (1807) and Luigi Maria Valadier (1827) restored parts of it.[278] At the same time, the interior was restored, as well as the side to Esquiline Hill. In addition, it was during the same period that they started the very first excavations: between 1810 and 1814 Carlo Fea excavated most of the layers dated between AD c.600 and c.1000. Afterwards, in 1874-1875 Pietro Rosa excavated the area of the arena and the underground level, where lots of ancient materials were still in place after the noted earthquake of 508, and on that occasion they found a great amount of the original marble decorations, including parts of the columns. [279] Finally, in 1895 Giuseppe Gatti excavated part of

[277] See F. Clementi note above, pp.209-245, and P. Colagrossi *L'Anfiteatro Flavio nei suoi venti secoli di storia*, (Florence-Rome, 1913).

[278] The Pope Pius VII wanted Stern to create a buttress on the side to the Lateran; something similar, but on the side to *meta sudans,* was done by Valadier under the Pope Leo XII. See Colagrossi, pp. 223-228.

[279] On the very first excavations at the start of the twentieth century, see R. Rea, 'Il Colosseo e la Valle da Teodorico ai Frangipane: note di studio', in L. Paroli, P. Delogu (eds.), *La storia economica di Roma nell'alto Medioevo alla luce dei recenti scavi archeologici: atti del seminario, Roma 2 3 aprile 1992*, (Florence, 1993), pp.71-88. On Gatti's excavations see Rea, *Rota Colisei,* pp. 66-84 and 85-107. Moreover, on that occasion they found lots of burials: see Rea, *Rota Colisei,* pp. 108-112, 113-120 and 121-125.

the external area, where they uncovered a small group of burials dated to Late Antiquity[280], while Antonio Maria Colini in 1939 made the very last excavation of the arena before the modern ones, excavating much of the huge fill of the underground levels[281].

5.3 - Archaeological Reconstruction and Recent Excavations

5.3.1 – Post-classical Traces of Reuse

Thus, the history of the Colosseum after the end of its original use (523) is characterised by a scarcity of written sources, especially for the medieval phases: as a consequence, it is crucial to analyse as far as possible the archaeological signs of re-use from the sixth century onwards. Such signs have been found at the ground level, and this is related to the massive restorations done to the higher levels between the eighteenth and nineteenth centuries, for they cancelled out most of the post-classical archaeological remains. The kinds of archaeological traces are obviously different, but mainly they can be divided into two groups: "negative" signs, and the visible ones on the walls of the Colosseum.[282] The first group includes both all the demolitions made to the original walls in order to create new passages to the arena, and the destructions of the stairs in order to re-use the materials. The "negative" signs are those created by the removal of something: obviously, those actions modified not just the look of the building, but its use as well, because its space was thought in a totally different way, not following the original arrangement, and creating new paths and spaces. The second group includes lots of different marks: while they all appear just as generic smaller holes their use was various, used either for gates, tethering animals, or creating mezzanines. In addition, there are graffiti

[280] See Rea, *Rota Colisei*, pp. 336-340.
[281] See Rea, *Rota Colisei*, pp. 336-340.
[282] For the presence of these archaeological traces and their characteristics, see Rea, *Rota Colisei,* pp. 170-185, 186-217, 218-227, 231-239 and 286-295.

and holes made for property plaques.[283]

This evidence has been fully studied by Rea and her team and, by assembling the information from the written sources and archaeology, it is possible now to divide the transformations of Colosseum into different macro-phases, mostly based on the different heights of the holes.[284]

The first phase has been dated between the sixth and the seventh century, when some openings were created in order to change access to and within the Colosseum itself: the archaeological indicators are holes for gate fittings, found on the walls. Then, between the eighth and tenth century (phase 2) the arena became the focus of attention, becoming a kind of internal courtyard and a common space, maybe for public use (i.e. the *cryptae*): if we consider the documents from S. Maria Nova archive, the first use of such spaces is in the first half of the eleventh century, but this does not exclude an earlier reuse.[285] As a consequence, many walls were demolished in order to open direct routes to the arena; it has been possible to recognise the signs of the walls and the stairs destroyed in order to do that. Moreover, the most external corridor (the fourth one) ceased to be used, no longer usable like the others. The break is the eleventh century, when the northern and the southern side of Colosseum started to follow different developments (phase 3): after the demolition of a porticus on the southern side of Colosseum, that side was closed from the outside, in order to increase the function of the arena as a central courtyard, while most of the building was occupied, with locals removing materials from the walls and stairs that were unused.[286] As a result, most of the inside of the building was fragmented into smaller units that had different functions.

The occupation of Colosseum continued between the end of the eleventh and the

[283] See Rea, *Rota Colisei*, pp. 231-239.
[284] See Rea, *Rota Colisei*, pp. 283-333.
[285] See Greco, 'L'insediamento medievale'.
[286] See Rea, *Rota Colisei*, pp. 169-327.

middle thirteenth century (phase 4), shown by the numerous holes for mezzanines and the data from the archaeological layers: in particular, the level of the floor in the arena and in the fourth corridor was increased by huge fills, and some parts of the building were permanently occupied. As analysed above, this phase is related to the first documents from S. Maria Nova, when half of Colosseum must have been in effect a huge apartment block. During the same period, they started to remove the ancient floor of the corridors – see below. From the first half of the thirteenth century to the start of the fourteenth (phase 5), the level of the floor rapidly increased again, and as a consequence the mezzanines needed to be lifted up, as it is shown by both the new holes for mezzanines, and the archaeological layers. The first graffiti on the walls of the building are dated to this phase: most of them are crosses, which have been related to the influence of S. Maria Nova, which owned part of the Colosseum.[287]

Afterwards (phase 6), the absence of the popes from Rome during the so-called Avignon Papacy (1309–1376) is another break (point) in the use of Colosseum: its occupation decreased, and just few of the *cryptae* were still used, as some holes for property plates testify, even if the archaeological information about the kind of use during the fourteenth century is really scarce.[288] In general, the Colosseum witnessed a period of neglect and abandonment, (i.e. there were no longer crosses on the walls); in 1431 the building was even closed with fences. Then, from the second half of the fifteenth century there were massive spoliations, while, at the same time, the Colosseum started again to be used for public exhibitions (phase 7), since, from 1485, the religious plays of Good Friday were held here. And yet on the other hand, the southern side of the building was quarried, given its precarious state. Archaeological traces of this phase are scarce: there are fewer holes for animal tethers, and some

[287] Ibid.

[288] These phases have been dated solely on the increased level of soils. In fact, despite the archaeological deposits have been removed, the signs on the walls still show the progressive increasing of the floors' levels.

graffiti. While the latter are mostly names or dates, the near absence of holes for tethering rings testifies that the building was no longer used for animal access.

Finally, from the sixteenth century to the end of the seventeenth century (phase 8), the archaeological traces of any kind of occupation are extremely scarce, and by 1700, most of the monument was totally closed.

5.3.2 – History of Excavations (1980s to 2017)

Subsequently, the Colosseum started to have an artistic and archaeological value: we have seen how the popes started the very first restorations and excavations in order both to preserve the monument and to examine Colosseum's history. Here it is crucial to stress that most of the archaeological layers that testified to the progressive fills, on which, for example, the phasing just examined depends, were removed especially during these very first excavations. Mostly, this is due to the will of restoring the original classical layout of the monument, deeply changed over the centuries. Unfortunately, despite the huge restoration works done in the Colosseum, only part of the documentation of the excavations carried out in the last thirty years is available, but little is complete. Nevertheless, for the excavations mentioned below, often the artefacts survive in store and have been examined afresh.

Below I summarise the excavations from 1986 to 2016 (Tab. 3; Fig. 34): at least five different archaeological teams worked in the Colosseum in this period, each focusing on a different area. As shown on the map, each colour represents one team, although the same colour is not necessarily the same archaeological campaign, given that often each team worked at least for a couple of years. However, this variety of teams and aims has obviously produced a very heterogeneous documentation, not always substantial; it is often poor and incomplete, so for this thesis not all of the excavations results can be considered accurate. Thus, after having studied all the

available documentation, only the best-executed and documented excavations will be detailed below.[289]

Team	Cuneo/Area	Year of Excavation
1. Pallarés	LXXIIII	1988
	LXXV	1989/1996
	VII	
2. Archeologia Rm	XLIIII	1995/1996
	XLV	
	XLVI	
3. Parsifal	LXVIII	1997
	Modern square	1997/2017
	XXXIII	2002
	XXXIV	2002
4. Not id.	XXXVI	Before 1986
	XXIII	2001
	XXIV	2001

Table 3: Summary of the main excavations done by different team inside the Colosseum. Here, I take into account the excavations by Università degli Studi di Roma Tre –the focus of the next Chapters.

[289] The plan shows all excavations undertaken. For the history of the excavations, see Rea, *Rota Colisei,* pp.67-82 and 341-343. I personally made the synthesis of those excavations after having analysed all the original reports.

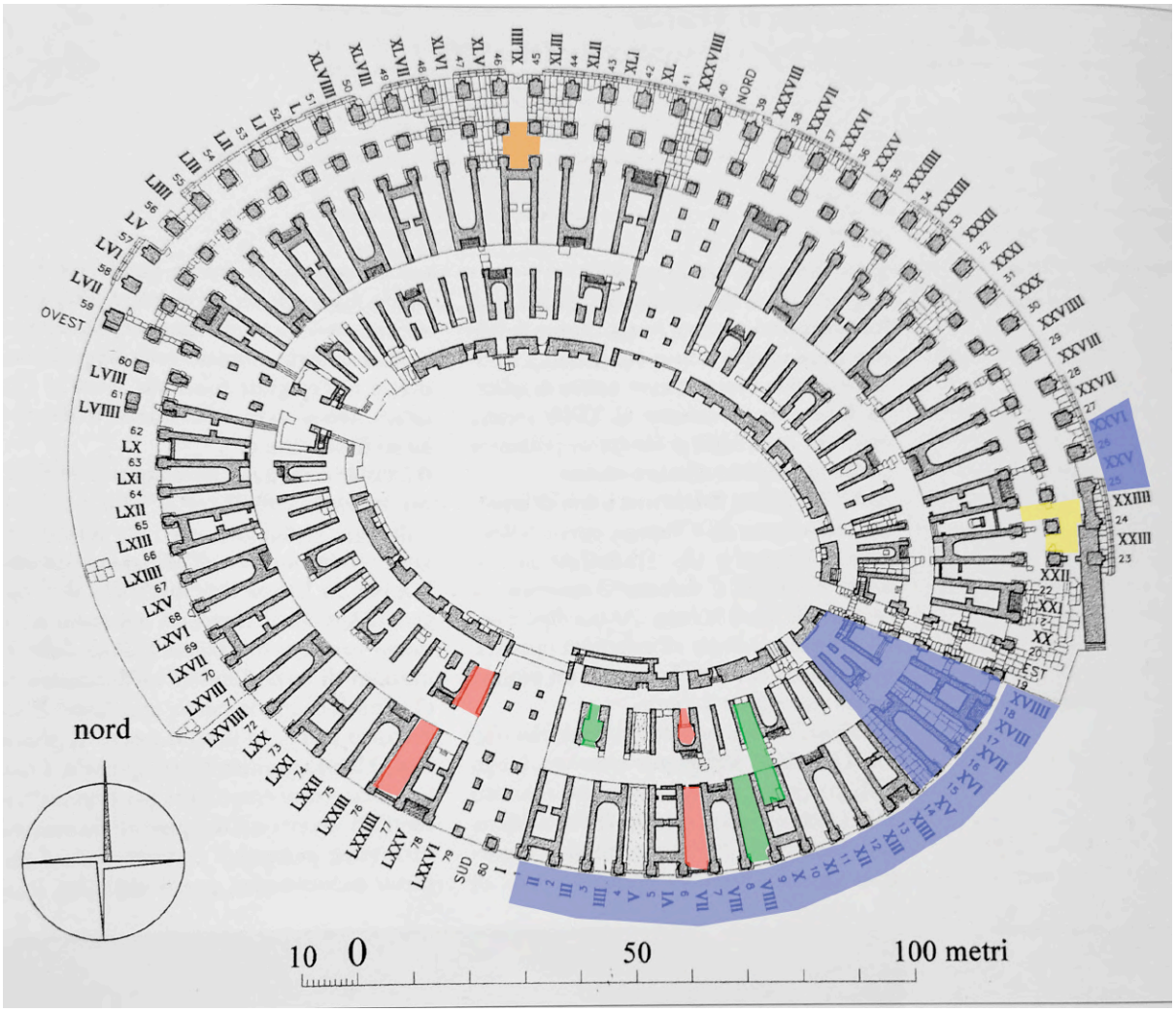

Figure 34: Plan to show the archaeological excavations in the Colosseum. Key: green indicates excavation by Roma Tre University (2012-2016); the red indicates those of Pallarés' team (1986-2005); the blue indicates archaeological cooperative or unit "Parsifal" (1997, 1999, 2007-2010); orange indicates the excavation by "Archeologia Rm" (1995-1996), another cooperative; yellow indicates the rescue excavation carried out ahead of the building of an elevator (2001) in the supposed area of Frangipane's palace. The plan does not show each "Cuneo" (wedge).

1. Between 1986 and 2005 were the excavations directed by Francisca Pallarés – red on the plan (Fig. 34). The team mainly featured architects who did not document the excavations as archaeologists would have done.[290] In 1988

[290] Most of the data in the analysis that follows result from the study of the available excavations' reports – some of them are missing from the original documentation held at Colosseum. Given the methodological choices of this thesis, some of the data are not reliable for quantitative analysis, thus they will be considered just in terms of chronology.

archaeologists started to dig in *Cuneo LXXIIII*, and the materials from this context are documented and partly published. The excavation took place in the passage that used to connect the second to the third corridor in *Cuneo LXXIIII*, on the south-western side of Colosseum. This area was totally restored by the half of the nineteenth century, after that the post-classical layers were removed. As a consequence, when the 1988 excavation took place, most of the archaeological layers had been already removed, compromising our ability to reconstruct the post-classical uses of this area. The 1988 excavation was focused on part of the original water system, which was analysed in order to explain both the building process and the progressive abandonment of the Colosseum's original functions. While here is not the place for discussing the structure of the complex water system of Colosseum, it is important to stress the data about the ceramics.

The excavation in this area generated materials, mostly small, dated from the second to the eighteenth century, depending on the layer. Despite the scarcity of materials for the eighth to thirteenth century, it was still possible to identify the main transformations that occurred here. In fact, the water system most likely fell into disuse between the end of the fourth and the fifth century, and by the ninth the original floor, which before that was still *in situ*, was removed. In addition, the chronology of ceramics reveals that, by the thirteenth century, part of the water system's parapets were destroyed as well. After that, the area was used almost continuously until the eighteenth century, when restoration works totally transformed this part, as it was completely covered by the modern floor. The scarcity of the information from the excavation of this small area is evident, but at the same time it was extremely important back then, because it was the first time that there were both the will and the opportunity to study the post-classical development of Colosseum – as Rossella Rea explained in her brief account published in

2002.[291]

This excavation was the first directed by Francisca Pallarés, and between 1989 and 1996 both *Cuneo LXXV* and *Cuneo VII* were excavated by her team. The adjoining *Cuneo LXXV* was excavated one year later, as the water systems of these two areas are connected. The results of this excavation have not been published yet, or at least not completely. In fact, some of the ceramics were partly analysed together with the ceramics from *Cuneo LXXIIII*; most of it has been studied by Maria Laura Cafini in a Masters thesis.[292] However, the archaeological finds of this area resemble those just analysed: the assemblage is characterised by its small size and heterogeneous chronology, from the second century to the eighteenth. The analysis of this area has been important in order to confirm the phases briefly analysed above. In addition, the level of the archaeological layers has been compared to some holes on the walls, made to support mezzanines.

The *Cuneo VII* analysis has not been published yet. Moreover, it is not part of the mentioned thesis, but fortunately it has been possible to read the original documentation for the excavations between 1996 and 2005. *Cuneo VII* is on the south-eastern side of Colosseum, next to the so-called Commodus passage (*passaggio di Commodo*). This area has undergone several transformations, and in the Middle Ages *Cuneo VII* was also used as a dwelling. Unfortunately, the data from the ceramics are incomplete: thus, while it has been possible to see a huge variety of classes, from the ancient to the modern age, the absence of

[291] See R. Rea, G. Schingo, 'L'inizio della spoliazione: lo scavo del corridoio LXXIIII', in Rea, *Rota Colisei*, pp. 436-445.

[292] This was a MA thesis for the Scuola di Specializzazione in Archeologia, at the Università la Sapienza (Rome): M. L. Cafini, *Continuità d'uso degli spazi del Colosseo in età medievale: I documenti materiali*, (Rome, 2009-2010).

any kind of further analysis prevents us identifying the phases.[293] It is important to observe that this documentation cites the earthquake in 1349 as the reason for the collapse and the progressive abandonment of the southern side of the Colosseum.

2. In 1995 and 1996 an archaeological cooperative or unit, called *Archeologia Rm*, investigated *Cunei XLIIII, XLV* and *XLVI* (see Fig. 34). The ceramics from *Cunei XLV* and *XLVI* have been published, at first just as a preliminary account in 1998, then again in 2009, this time as a specific analysis of the post-classical ceramics.[294] The first account is really brief, focusing more on describing the layout of the areas excavated in that occasion. In particular, this was the first time that three *cunei* were fully excavated, and the main reason for that was the presence in *Cuneo XLVI* of a post-classical structure, generally identified as a trough for animals, and already visible before the archaeological excavation. In addition, in *Cuneo XLV* it was possible to identify a thirteenth-century floor, made of pieces of bricks and small stones. The preliminary analysis of the ceramics was crucial for dating those post-classical activities inside Colosseum: most of the evidence here is dated between the second half of the twelfth and the start of the thirteenth century: in fact, while the ceramics found in the corridors facing the *cunei* date to the early thirteenth century (as the few sherds recognised as Latium ware show), inside *Cuneo XLV* the archaeological evidence is dated to the second half of

[293] The archaeological reports list all the finds; as for ceramics, the classes mentioned are Forum Ware, Sparse Glazed Ware, Latium Ware, Renaissance Majolica, Common Ware, Red Slip Ware, amphorae. Unfortunately, most of these lists are extremely vague.

[294] See R. Rea, S. Coccia, 'Anfiteatro Flavio. Indagine archeologiche in corso al primo ordine: note preliminari sui depositi postantichi', in E. De Minicis (eds.), *Le cermiche di Roma e del Lazio in età medievale e moderna III: atti del III convegno di studi (Roma 19-20 Aprile 1996)*, (Rome, 1998), pp. 119-123; A. Delfino, 'Depositi tardomedievali e moderni dai cunei XLVI e XLV dell'Anfiteatro Flavio', in E. De Minicis (eds.), *Le ceramiche di Roma e del Lazio in età medievale e moderna VI: atti del VI Convegno di Studi La ceramica dipinta in rosso. I contesti laziali a confronto con altre realtà italiane (Segni, 6 - 7 maggio 2004),* (Rome, 2009), pp. 235-254.

the thirteenth century. Apart from the ceramics, valuable is a lead seal (*bulla*) of Urban IV (1261-1265). But this brief preliminary analysis gives no information about, for example, the quantities of the ceramics or their percentages.

Part of the ceramic assemblage from both *Cuneo XLVI* and *Cuneo XLV* was analysed by Alessandro Delfino, whose aim was to verify the use of this area of the Colosseum between c.1150 and c.1280/90.[295] The excavations here focused on both the corridor and the Type-A space underneath the stairs of *Cuneo XLVI*, meaning one huge trapezoidal space, 48m to 60m^2. As for *Cuneo XLV*, the excavation took place in a Type C, thus a small trapezoidal room, about 21m^2 including an access corridor. In *Cuneo XLVI* the ceramics studied come from the medieval fill caused by the spoliation of the corridor, and from the medieval earth floors of the type-A space.

The sherds in the corridor are 3,239 in total: 48% is medieval common ware, and 23% is cooking ware. The fine wares are less well represented (14% of Sparse Glazed Ware, and less than 1% of Green Glazed Ware), while the residual ancient ceramics is about 10%.

Regarding the main forms and the chronology of this assemblage, all the classes have the forms typical of the twelfth century: for example, the main form of Sparse glazed ware is the jug, which is represented by its latest production, characterised by really scarce glazed surfaces, and the same kind of clay used for the common ware. This latest production is dated to the end of the twelfth century - a chronology confirmed by the types of other classes, such as two particular types of so-called globular amphorae, dated between the end of the twelfth and the early thirteenth century (Fig. 4). Finally, the few

[295] See Delfino, 'Depositi tardomedievali', note above.

sherds of Green Glazed Ware belong to the twelfth century as well, most likely being produced outside Rome, i.e. Campania, and thus dateable to thirteenth century.[296]

As for the finds from the type-A space along the same *cuneo*, a few layers of earth floors have been studied. The ceramics are extremely scarce here, given the kind of archaeological layers: there are just 80 sherds, mainly dated to the seventeenth century, given the presence of a particular production of glazed cooking ware. The late chronology of the stratigraphy from the "inside" of this space shows that its use continued at least until the modern period. Concerning *Cuneo XLV*, Delfino has studied the ceramics assemblage from the resulting type-C space. In total, 726 sherds were found, with the medieval common ware being 40% of the total, while Latium Ware is 30% - a very high percentage for this class (Fig. 35).

Figure 35: Latium Ware jugs from Colosseum. (Source: Ricci 2002, Fig. 36, p. 374)

[296] For the thirteenth-century imported ceramics, see Chapter 2.

At the same time, there are some sherds of Green Glazed Ware (5% of the total) produced in Rome during the thirteenth century – a variation of Latium Ware. In addition, the absence of Archaic Majolica, dated to the fourteenth century, is crucial because it dates the assemblage strictly to the thirteenth century. The main Latium Ware forms are jugs and bowls, while jugs are the only Green Glazed forms in this assemblage. Finally, small percentages of imported ceramics (less than 1%), mostly from Southern Italy, and cooking ware (13%) complete this pottery assemblage, while the residual classes (both ancient and medieval) are extremely scarce.

The undeniable thirteenth-century chronology of the ceramics analysed in this *cuneo* has been related to works done in Colosseum in that period, notably to make the *cryptae* accessible again after the huge spoliations that during the twelfth century totally transformed the layout of the area. Delfino's conclusion about the use of this part of the Colosseum between the twelfth and the thirteenth century points to the same image we have from S. Maria Nova's documents: most likely, the *cryptae* were part of more complex properties. His hypothesis is that they could be cellars of some kind for some *domus solaratae* above or behind them, but unfortunately, at the moment, there is no archaeological proof of that.

3. Next, several excavations were carried by the Parsifal cooperative, starting from 1997 with the latest in 2017, but they were not continuous (blue on Fig. 34). The contexts excavated by this cooperative are very different, some of them being inside the Colosseum (*Cuneo LXVIII* and *Cuneo XXXIII*), others in the huge modern square outside the building itself, most on the south-eastern side of Colosseum.

   Outside the square most findings have been affected by the massive

transformations of that area – mostly due to the works for the *Metropolitana*, and to the layout of the square itself, which is the current entrance into Colosseum. As a consequence, the reliability of most of the materials coming from the square is really limited, as they are extremely heterogeneous. The only useful ceramics fully studied and published come from a medieval pit, dated to the first half of the eleventh century and again studied by Alessandro Delfino.[297] Here, while excavating for analysing the original ancient floor of this area outside the Colosseum in front of *Cunei XXV* and *XXVI*, archaeologists found an intentional pit excavated breaking the floor itself: the particular shape of this pit, called "*a fiasco*" meaning that the very top of it is smaller than the bottom and so resembling a wicker wine bottle, dated it to the Middle Ages. The analysis of the ceramics dates this assemblage to between the end of the tenth and the start of the eleventh century. In total, there were 1,492 sherds, most of which were so well-preserved that led to reconstruct some vessels in their entirety. The Cooking Ware (31% of the total), the Sparse Glazed Ware (24%) and the Common Ware (21%) are the most numerous classes of this assemblage. For the Cooking Ware, the main forms are the *olle* (cooking pots), and all the *olle* types found here are characterised by wide mouths typical of the eleventh century.

For Sparse Glazed Ware, the forms are varied, but the main one is, as usual, the jug, but there were sherds of a basin, some lamps and a lid as well. Both the forms and the kind of glazed surfaces, characterised by the presence of both a shiny and homogeneous glaze and a thin and patchy glaze, point to the transition period between mid-tenth and the start of the eleventh century – from when the latest Forum Ware production coexisted with the first Sparse

[297] See A. Delfino, 'Un "butto" della prima metà dell'XI secolo presso piazza del Colosseo', in *Bullettino della Commissione Archeologica Comunale di Roma*, 109, (Rome, 2008), pp. 161-173.

Glazed production.[298] In the case analysed here the "transitional" frame dated to c. 1050 is really evident. This chronology is confirmed by the Common Ware as well, characterised by jugs and amphorae: both the vessel forms and the kind of combed decoration are generally dated to the eleventh century. For the other classes, like the early-medieval Forum Ware or the ancient vessels, they are both residual in this context. In addition, their frequency (almost 14% of the total) is small, for the whole context. This is really interesting considering the nature of the assemblage itself, which most likely is a primary context, suggesting the objects were still in their original deposition. Moreover, the animal bones have been studied, and compared to the ceramics – in terms of the analysis of the medieval food habits, which we will discuss later.[299]

In summary discovery of this medieval pit was extremely important: first of all because it is one of the few example of tenth to eleventh-century assemblage found in the area of Colosseum, deeply affected by significant changes; then, since this pit was dug into the original ancient floor, we must assume that between the tenth and eleventh century the level of the soil here was still the same as the classical age, and the huge deposits started only later – most likely, between the end of the eleventh and the start of the twelfth century.[300] In addition, as Delfino explains, the presence of such pit just outside the Colosseum makes sense with the presence of people owning and renting the *cryptae*, as it is testified in the written sources. In fact, the finds from this pit external to the Colosseum are totally homogeneous with the finds inside the *cryptae*: even though this assemblage is dated before the

[298] See Paroli, 'Ceramica a vetrina pesante altomedievale (Forum Ware) e medievale (Sparse Glazed)', in *Crypta Balbi 5,* pp. 314-356. For *Vicus ad Carinas*, see Chapter 4.
[299] See Conclusion.
[300] See F. Guidobaldi, 'Un estesissimo intervento urbanistico nella Roma dell'inizio del XII secolo e la parziale perdita della « memoria topografica » della città antica', in *MEFRM*, 126, 2, 2014.

assemblages from the *cryptae*, forms and types found in the pit anticipate preceding forms and types from the inside. This suggests that some external areas were used as dumps.

As said, this is the only reliable assemblage from the area outside the Colosseum, as the rest of excavations, in front of *Cunei* I-XVIIII, are just documented by the excavation reports. However, the same cooperative also worked inside the Colosseum, excavating *Cuneo LXVIII* first in 1997, and *Cuneo XXXIII* and *Cuneo XXXIV* in 2002. For the first one, its excavation was really important, because it is the first (and still the only) original level dated between seventh and ninth century ever found inside Colosseum, thus it is evidence of the continuous use of the building between the seventh and the tenth century. There was limited pottery from the fill of the sewer found here.[301] In total, 354 sherds were recovered, but more than half of them were residual (213 sherds) as they were in the top layer (context n.157), which is dated to the twelfth century. However, the ceramics found here date between the late seventh century and the ninth century. Among the various forms recognised, notable is the presence of some lids and some bowls, as both of them were not produced in the period c.950 to 1180. The cooking pots (*olle*) are characterised by wide mouths, typical of ninth-century production. The only fragment of Forum Ware found here, characterised by the thick and shiny glazed surface typical of the ninth century (or earlier), completes this assemblage and confirms the early medieval chronology. As mentioned, the top layer is dated instead to the twelfth century, because of the presence of Sparse Glazed Ware. Although most of the sherds from this top layer are residual, they were most likely residual from the same activities that first involved the layers analysed above. In fact, the residual Forum Ware from the

[301] See R. Rea, I. De Luca, F. Del Vecchio, 'Roma. Anfiteatro Flavio. Depositi altomedievali indisturbati al I ordine', in De Minicis, *Le ceramiche di Roma e del Lazio in età medievale e moderna IV*, pp. 155-164.

top layer of the pit is homogeneous with the in-phase Forum Ware of the first layers, meaning that they were somehow part of the same group.

Thus, given the general scarcity of well-known assemblages dated before the tenth century, the importance of the few ceramics found in *Cuneo LXVIII* is evident, because it enriches (and confirms) our knowledge of the ceramics circulating in Rome. By contrast, although *Cuneo XXXIII* and *Cuneo XXXIV* have not been published at all, the records indicate again the gap between the late antique layers and the late medieval layers, confirming that the twelfth century spoliations involved most of the building and cancelled most of the archaeological layers dated between the seventh and eleventh century.

4. A couple of other excavations involved parts of Colosseum, which for the current state of the available documentation cannot be surely related to a specific team: this is especially true for both *Cuneo XXXVI* and *Cunei XXIII* and *XXIV*. The first excavation in *Cuneo XXXVI* dates to 1986, when Rossella Rea published the preliminary archaeological report.[302] This report is mainly focused on the archaeological and structural features of the space that was excavated, a type-C space underneath the stairs in *Cuneo XXXVI*. Then, the archaeological layers are fully described, for Rea was trying to divide them into different phases. The ceramics were only briefly described, with detailed study planned. Marco Ricci fully published this ceramic assemblage in 2002 and this is still one of the most important references for the medieval ceramics of Rome.[303] The assemblage of *Cuneo XXXVI* comprises more than 15,000 sherds, mostly dated between the twelfth and thirteenth century, and it contained numerous new typologies that enriched the *Crypta Balbi*'s catalogue. Here the focus will be the main features of the central medieval

[302] See R. Rea, 'Notizie preliminari su un rinvenimento di età medievale al Colosseo', in *Archeologia Medievale*, 13, 1986, pp. 357-364.
[303] See M. Ricci, 'I reperti archeologici del sottoscala XXXVI', in Rea, *Rota Colisei,* pp. 344-403.

ceramics, so as to easily compare them with finds in the very latest excavations in Colosseum. The main classes found in *Cuneo XXXVI* are Cooking Ware, Common Ware, Glazed Wares (both Forum and Sparse Glazed Wares) and Latium Ware. All the classes had a great variety of form and types.

The most important characteristic of this assemblage is that it is possible to clearly see the evolution of the forms and the types within the thirteenth century. For example, the aforementioned *testi* are represented by their latest types, dated to the first half of the thirteenth century, while such a common form as the cooking pot (*olla*) is represented by many more types. In fact, this one being a functional and very common vessel form, the various types are characterised by longer usage than other forms: as a consequence, despite some types being similar to one another, they are much more common, especially if we consider that the cooking pots are normally three times more numerous than the *testo*. In general, in the *Cuneo XXXVI*'s assemblage all the cooking pot types are typical of medieval Roman production, being characterised by one or two handles, a short and not wide mouth, and globular shape. The most represented group is dated to the twelfth and thirteenth century; the same chronology is confirmed by the lids, which were produced again in Rome from the end of the twelfth century. The Common Ware's main forms are the amphorae and their supporting bases, the lids, and the jugs; the latter are particularly important because, as Marco Ricci clearly explains, this production is totally similar to the contemporary latest production of Sparse Glazed Ware – hence, the hypothesis that the same *ateliers* produced those classes. However, the chronological frame of this assemblage is even clearer if we look at the fine wares, as Latium Ware is the representative class of this assemblage. In fact, this class is more than the 73% of all the other fine wares (in this case imported wares from Southern Italy),

and it was possible to reconstruct 55 almost complete vessels. Most of them are jugs, but with notably few bowls, given that bowls were progressively introduced from c.1250. As a consequence, both this and the quality of the glazed surfaces, as well as the decorations, clearly date to the first half of the thirteenth century, making this thirteenth-century assemblage one of the most important and substantial of Rome. In general, the state of the vessels is good and the level of fragmentation is relatively low:[304] these features identified by Ricci as an intentional pit, most likely related to people who lived in the *cunei* nearby – as analysed above about the eleventh-century pit studied by Delfino.

However, the archaeological deposits of this large assemblage were apparently incomplete: most likely the bottom layers are the remains of some earlier pit that was totally removed during the twelfth century, as part of the huge spoliations that involved the Colosseum then. Although in this way we have lost all the information about the period between the tenth and the start of the twelfth century, still this is useful when we want to make hypotheses about the provenance of the ceramics in the secondary contexts nearby. This assemblage is completed by the glass fragments, fewer than the ceramics, but important for a more detailed overview of the objects circulating in Rome between the late twelfth century and the start of the thirteenth.

Finally, in 2001 *Cunei XXIII* and *XXIV* were excavated ahead of the building of a lift. While a small excavation, it was important as it was in the area presumed to be part of the fortified palace of the Frangipane. Unfortunately, the excavation found very little of note and there is no documentation so far; however, it is worth explaining the reasons of such hypothesis. A recent study by Delfino focuses on the presence of the Frangipane's *palatium* in the

[304] See Chapter 7 for a more thorough discussion of the significance of fragmentation.

Colosseum, analysing the sources, both historical and archaeological.[305] The first ones are some mentions in the written sources, the first of which is dated to the twelfth century, while the latest is dated to the start of the fourteenth century. All of those sources, mostly related either to the popes or to the sale of part of those properties to someone else, mention either a *palatium* or a *munitio*, meaning a fortified building, as was typical of that period. But none gives any kind of information about **where** in the Colosseum this fortified palace was. Due to some sixteenth-century depictions of the Colosseum (Fig. 36), the common hypothesis is that the palace lay close by the eastern entrance to the building – thus partly in the area occupied by *Cunei XXIII* and *XXIV*.

Figure 36*:* Depiction (*Colassaei Ro. A Barbaris Diruti Prospectus*) of the Colosseum by Hieronymus Cock, dated to 1551. (Source: Delfino 2018, p. 35)

In addition, recent analysis of the holes on the southern façade of the Colosseum allows us to hypothesise a reconstruction of this palace, partly reusing the original

[305] See note 288.

ancient building: the palace clearly did not occupy the whole Colosseum, since we know that some parts of it were rented to various inhabitants. Most likely, the private dwellings and the palace were not physically connected, despite the fact that the Frangipane often owned some of the dwellings as well.

As seen from this brief overview, the circumstances and quality of excavations and post-excavation work for Colosseum are extremely varied, and here we have considered only the main excavations, or at least those with medieval ceramics assemblages. Nonetheless, it is important to recognise that every single change of the modern layout of the Colosseum has involved some excavations – including the placement of its gates. Overall, the ceramics are extremely heterogeneous, thus testifying to the uninterrupted use of at least some parts of the Colosseum from the end of its original use until the late thirteenth century. As a result, the chronological range of the ceramics reflects the complexity of this site. At the same time, it has been possible to recognise some main phases: in fact, almost all the excavations that we analysed lack early medieval primary contexts, as the ceramics from the seventh to the eleventh century are mostly residual. By contrast, the central medieval phases, in particular those dated between the end of the twelfth century and the first half of the thirteenth, are well represented, because they correspond to the great medieval phase of spoliation. Thus, it is wrong to associate the scarcity of ceramics dated before the twelfth century with the abandonment of the monument: by contrast, it was probably one of the most 'lively' period in the post-ancient life of the various *cryptae*, as partly confirmed by the written sources.[306]

5.4 - The Excavations by Roma Tre University

Since 2011 Roma Tre University began collaborating with the Soprintendenza Speciale per i Beni Archeologici di Roma to work on the post-ancient utilisation of

[306] See Greco, 'L'insediamento medievale'.

the Colosseum. The aim was to open archaeological excavations in specific areas of Colosseum: *Cunei III, IX* and X and part of the area immediately outside the latter *cuneo*, in the modern square that surrounds Colosseum. The excavations, directed by Professor Riccardo Santangeli Valenzani and Dr Rossella Rea, began during the summer of 2011 and they have excavated most summers since; post-excavation analyses took place each winter to complete accurate stratigraphic matrices with correct chronological phases based on the analysis of the numerous findings. This documentation is detailed because of the methodological choices made from the very first year, and most of the finds – ceramics, glasses, and metalwork – have been thoroughly studied.

Excavations first focussed on *Cuneo III* and part of *Cuneo X*; in 2012 were extended to the corridor of *Cuneo X* and part of *Cuneo IX*.[307] Next, during July 2014 work returned with new archaeological surveys in *Cuneo IX*, which lasted until the following year. From 2016 excavation moved to the external area of Colosseum, where originally there was the southern part of the most external corridor. As said, the basic aim of these excavations is to study the use of Colosseum after the ancient period, aware that the stratigraphy was compromised both during the Middle Ages and the Napoleonic period: given that there are almost no strata at all pertaining to the early medieval phase, it will only be possible to obtain further information by studying archaeological finds such as pottery. In addition, the latest archaeological campaigns (2016 and 2017) in the external area of Colosseum hoped to date the collapse of this side of the building, and to locate any possible evidence of the medieval Frangipane palace (Fig. 33).

The next sections analyse the medieval pottery found during the archaeological campaigns between 2011 and 2014, in particular that from *Cuneo IX* and from the

[307] These areas are at the first level of the southern part of Colosseum.

corridor of *Cuneo X*.[308] The ceramics from *Cuneo III* is not part of this work because, even though the excavation has finished, the archaeological data are still uncomplete. The data belonging to the *crypta*[309] of *Cuneo X* are added to complete its analysis, although they have been studied by Eva Castellucci. Moreover, it has been possible to complete the reconstruction of this area adding the data from the glass fragments, studied by Francesca Colangeli.[310] Thus the ceramics found during the latest archaeological campaigns are not considered because the excavation is ongoing; but will be briefly presented in order to show possible chronological connections between the internal and the external areas. Finally, it is important to bear in mind that the next sections focus only on the pottery belonging to medieval strata, and does not pretend to be full for all phases.

5.4.1 - Cuneo IX and Cuneo X: The Archaeological Layout[311]

Cunei IX and *X* are in the southern side of Colosseum (Fig. 34 - green), and while *Cuneo IX* was originally a direct access point to the arena, thus a simple passage, *Cuneo X* is a Type B space, meaning that it has two rooms, facing the third corridor. In particular, the recent excavations took place in the first of the two rooms, the northern one, and in the portion of the corridor facing this room. As for the room behind, it has been separated to the one recently excavated, as often happened for

[308] The archaeological analysis of the ceramics is published in L. Campagna, 'I materiali ceramici di epoca medievale del cuneo IX', pp. 112-127, and L. Campagna, E. Castellucci, 'I materiali ceramici di epoca medievale del cuneo X', in Facchin-Rea-Santangeli, *Anfiteatro Flavio*, pp. 128-165.

[309] The word *crypta* is often used in late medieval documents to indicate a closed dark space; this definition agrees with the aspect that some areas of Colosseum would have had. There are no documents for the Early Middle Ages, but it is possible to imagine a similar use of this word; Rea, *Rota Colisei,* pp.228-230.

[310] See F. Colangeli, 'I materiali vitrei dei cunei III, IX e X', in Facchin-Rea-Santangeli, *Anfiteatro Flavio*, pp. 166-195.

[311] For the archaeological analysis of the strata, see G. Facchin, 'Vite e usi dell'Anfiteatro Flavio attraverso le fonti materiali'; G. Armone, N. Evangelista, G. Giovannetti, 'L'analisi dello scavo – Il cuneo IX'; M. Bernardi, M. Stefani, 'L'analisi dello scavo – il cuneo X', all in Facchin-Rea-Santangeli, *Anfiteatro Flavio*, pp. 54-79, 84-92, 93-102.

those kinds of spaces. We have therefore two kinds of spaces: a closed one, and the corridors, one of which is in front of the closed space. As mentioned above, in order to understand the way of reusing the spaces inside the Colosseum, it is necessary to imagine that it was divided into "wedges" during the Middle Ages, and each "wedge" consisted of a different property possibly belonging to a different owner – or rented and used by different people.

The very first excavations that took place in *Cuneo IX* were made by the Pallares team between 2008 and 2013. As said above, the state of the available documentation does not let me exploit the ceramics. In particular, the recent excavations have focussed on some layers that filled the ancient sewer, originally dated to the Flavian period, plus some actual layers of the passage. Given the kind of archaeological layers, mainly characterised by their small sizes, the findings are extremely limited, and this is the reason why they are analysed here together with the ones from *Cuneo X*. Nonetheless, we can recognise some phases, dated by the ceramics: although the ancient and late antique phases will not be discussed here, just the the medieval. In particular, only few layers have been dated to the early Middle Ages (eighth to ninth century), given the presence of some sherds of Forum Ware. As confirmed by the absence of consistent early medieval layers, this area was once again affected by the massive spoliations that took part in the Colosseum between the eleventh and the twelfth century.[312] However, the noted spoliation certainly happened during that gap, most likely before the twelfth century, because of the presence of archaeological layers dated from the twelfth century onwards. In addition, in *Cuneo IX* the spoliation is associated with the creation of a wall made of reused bricks and stones and that was used to divide the corridor in two unconnected areas, given the absence of any kind of sign of a doorstep. The division of the corridor of *Cuneo IX* in two different areas is extremely important, for it is the first sign of a kind of

[312] See note 315.

parcelling plan of the Colosseum during the Middle Ages. So, at the start of the twelfth century this wall was destroyed, and thus the corridor was unified again, but this only lasted until the end of the same century, when a new wall was built, using irregular stones, and various fragments of marble as well. The new layout of this area was maintained for a while, as each part of *Cuneo IX* started to be used differently: the northern part was most likely used as a kind of small yard, while the southern part was massively transformed. Just in front of the western wall of this *cuneo* there are the remains of a kind of counter, mainly made with reused pieces of bricks and stones, and most likely used as a store.[313] In addition, some holes found on the walls of the same *cuneo* were probably used for wooden mezzanines: all this evidence lets us hypothesise the use of this southern part of *Cuneo IX* as a stable for animals, while there is no evidence for dwellings, such as hearths. At the same time, still at the end of the twelfth century, *Cuneo IX* and *Cuneo X* were divided by a wall, made of heterogeneous materials, such as bricks and stones (Fig. 40).

During the first half of the thirteenth century *Cuneo IX* was abandoned, and the counter was destroyed as well. The late medieval and modern archaeological layers do not show any more actual use of this *cuneo*, which was first affected by a massive spoliation at the start of the fourteenth century, before it again became a direct passage to the arena in the fifteenth century. Finally, in the nineteenth century the restorations removed most of the modern deposits created after the thirteenth century, in order to restore the original level of the soil inside the building.

[313] For the layouts of Cuneo IX, see Facchin, 'Vite e usi'.

Figure 37: The crypt excavated in *Cuneo X*. (Source: Facchin *et al.*, 2018, Fig. 7, p. 96)

We have mentioned how *Cuneo X* had a different development, firstly due to its different structure, being a closed space (Type B) between the second and fourth corridor (Fig.37). As analysed above, the type-B spaces are characterised by the presence of two different rooms, originally connected each other: in the case of *Cuneo X*, the two spaces have been dived by a tufa block, still *in situ*, and then each one had a different use. Unfortunately, at the moment it is not possible neither to date this division, or to hypothesise about the use of the southern space, as the latest excavations in this *cuneo* have been focused on the northern space, facing the corridor, while the southern one, nowadays facing the external square, has not been excavated yet. The excavations in *Cuneo X* took place between 2011 and 2012, and they were focused on the northern part of the type-B space (from now on, the so-called "internal part"), on part of the third corridor, and on the space between the third and the fourth corridor (from now on, the so-called "external part").

As for the other excavations analysed above, there is a gap between the latest ancient phases and the late medieval phases, due to the massive spoliations discussed above.

In fact, the first archaeological evidence dated to the end of the twelfth century is related to the spoliations of the travertine blocks of the floor, and to the creation of the wall that used to divide *Cunei IX* and *X*: before the late twelfth century we have no archaeological evidence at all, but the residual ceramics. Next, during the first half of the thirteenth century, the small room of the internal part of this *cuneo* started to be used, as confirmed by the presence of a wall built in front of the back wall of this room. Due to its poor state of conservation, its real function is unclear, and the idea of a multi-functional counter is still a hypothesis. Certainly, during the same phase there was a small hearth in the western part of the small room. Both those types of archaeological evidence point to a temporary, active use of this part of the *cuneo*, even if it is difficult to define this as a fixed "living" use.[314] Already during the second half of the same century, the back-wall counter was removed, and replaced with a structure similar to the counter seen in *Cuneo IX*, in this case parallel to the eastern wall of the room itself. In addition, at least a couple of floor levels have been archaeologically recognised. After the end of the thirteenth century this area was progressively abandoned, according to a pattern we have already seen, common for all the reused spaces of Colosseum. However, it is very clear that several transformations occurred in this internal area between c.1175 and c. 1250, almost too many, considering the brief period between them. As a consequence, the hypothesis of those changes of use depending on the change of the people renting this bit of the Colosseum is fascinating. In fact, the numerous transformations might be interpreted as the rearrangement of this space depending on the will of the new tenants/owners, thus making the medieval life of Colosseum even more interesting. Moreover, whenever such changes are absent or minor, we might hypothesise that tenants did not change. As for the so-called external area, it was only affected by minor transformations, mainly related to the renovation of the floor level, as will be discussed in detail in the section on medieval ceramics below (Section 5.5).

[314] Ibid.

In summary, both of *cunei* have been affected by several transformations, mainly in the early thirteenth century. While in *Cuneo IX* the archaeological remains are scarce, *Cuneo X* saw much change, including change from a "living" place to a storage space. The analysis of the ceramics below helps to better define these transformations, and to question who was actually reusing those very different spaces.

5.5 - *Cuneo IX* and *Cuneo X*: The Ceramics

In general, from both of the *cunei* the medieval ceramic classes were mainly locally produced, such as Sparse Glazed Ware and Latium Ware, while in this context the imported ceramics are extremely rare. Moreover, the differences in layouts between *Cuneo IX* and *Cuneo X* are reflected in the ceramics as well: while from *Cuneo IX* there are 2,000 sherds, the *Cuneo X* returned 8,789 sherds (Tabs. 6 and 7; Figs. 50 and 51). In particular, about the latter, the so-called internal area has been studied by Eva Castellucci, thus her analysis will be used as a comparison for the ceramics from the external area of the same area.[315]

The main difficulties for *Cuneo IX* were related to the scarcity of the ceramics, but stratigraphic analysis helped to complete the division between different phases. The very first medieval phase that contained medieval ceramics is the one related to the destruction of the first dividing wall, and dated at the start of the twelfth century: in total, there are 102 sherds, 64% are residual, and 37% are in phase. Among them, it was possible to recognise some in-phase sherds, such as the handle of an amphora (type Cb5 n. 170) dated to between the end of the eleventh century and the start of the twelfth century (c.1100), and a small sherd of a medieval lamp, characterised by its open shape (so-called "*a vasca aperta*"), typical of the start of the twelfth century (Fig. 38).

[315] See Campagna-Castellucci, 'I materiali ceramici di epoca medievale'.

Figure 38: Medieval lamp called "*a vasca aperta*" from *Crypta Balbi*, diam. cm 1x7.4, h. cm 3. (Source: Ricci-Vendittelli 2010, Fig. I.9.1, p. 93)

Next, the phase described as the actual "life" of the *cuneo*, characterised by the new dividing wall and the so-called counter, returned 1,368 sherds - 94% of them residual, and only 6% are in phase. Anyway, despite their high level of fragmentation, some main types have been recognised. For example, in the Cooking Ware there was one lid (type Cb5, n. 93), typical of the late twelfth century, characterised by the upside down form (as a bowl) with the grip at the centre of it, and even the rim of the *testo* found here (type Cb5, n. 20) is typical of the late twelfth century.

This late chronology has been confirmed and even shifted later given the presence of a sherd of Latium Ware, typical of the thirteenth century. In contrast, both Sparse Glazed Ware and Common Ware have some rims typical of the first half of the twelfth century, so they cannot be considered the classes in phase for the layers from this phase, as here ceramics in-phase is dated to the second half of the twelfth century.

The following phase, which is characterised by the destruction and the progressive

abandonment of this *cuneo*, is dated to the first half of the thirteenth century: in fact, the layers contained 385 sherds, and 79% of the total were residual. Few are in-phase: a single sherd of Latium Ware from the thirteenth-century productions, and the base of a decorated amphora (type Cb5, n. 181; Fig. 39), the production of which started in the early thirteenth century.

Figure 39: Medieval base for amphora found in Cuneo IX of the Colosseum. (Picture: Lucrezia Campagna)

For the other classes, such as cooking ware and Sparse Glazed Ware, the identifiable sherds are all dated to the twelfth century. Finally, the latest phase related to the late medieval spoliations, has just 128 sherds of which all but 4 are residual. This is due to the kind of deposits in which the ceramics were found, but the consequence is that the ceramics itself cannot date this phase, which was surely formed after the thirteenth century, given the presence of a few thirteenth-century sherds, such as a sherd of Latium Ware, recognisable despite its bad condition. Overall, the ceramics in *Cuneo IX* are scarce, but these do help to define the main phases of the medieval reuse of this part of Colosseum between the start of the twelfth century and the end

of the thirteenth. Finally, there is no evidence of the early medieval phases, despite the presence of a few Forum Ware sherds, all of which are in the later twelfth to thirteenth century layers, as the actual early medieval layers were removed in the very first spoliation mentioned in relation with the earliest phases of *Cuneo IX* itself.

Cuneo X contained a large amount of ceramics, as its stratigraphy was far more complex than in *Cuneo IX*. In fact, there were more archaeological layers in *Cuneo X*, given that it had not been excavated before. In addition, the layout itself of this area, which includes the resulting space originally underneath the stairs, meaning the medieval *crypta*, clearly affected both the reuse and, as a consequence, the archaeological layers formed here (see Section 5.4.1). However, it has been possible to identify and date the main phases of the medieval reuse of this *cuneo*, and this more complex case let us fully analyse the scarcity observed of *Cuneo IX*'s data – as *Cuneo X* was excavated before *Cuneo IX*. Here, I will present the data from the so-called "external" area, while the "internal" area evidence will be used as comparison in order to complete the analysis of this *cuneo*.

As in the previous *cuneo*, the very first phase has been dated to the end of the twelfth century, and it was related to the spoliation of the floors and the creation of the dividing wall. While the archaeological evidences for these removal activities are few, it yielded thousands of pottery fragments in huge fills. Moreover, all the archaeological layers for this phase were concentrated in the external area, as the actual reuse of the internal *crypta* had not started yet. At the same time, since the phases dated before the twelfth century are totally absent, it is most likely that we have no data for the previous phase of the *crypta* as layers were removed just before the start of the spoliations. The main archaeological activity, dated to the end of the twelfth century, contained 3,980 sherds: almost 30% of them residual ancient materials, a common feature of those kind of large medieval fills yet lower than many. In addition, the early medieval Forum Ware (171 sherds, 4.30% of the total)

has to be considered as residual, too, as there are no layers dated to the early medieval phases. Forum Ware dates back to the ninth and tenth centuries, but even if it is residual in this context, its presence is crucial in order to develop some hypothesis about its use and circulation in Rome, especially if compared to some primary contexts as *Vicus ad Carinas*, and about the early medieval use of the Colosseum.

As for the classes dating this phase, there are Sparse Glazed Ware (1,089 sherds, 27.3%), medieval Common Ware (450 sherds, 11.3%), and Cooking Ware (1,102 sherds, 27.7%): the latest type is dated by the start of the thirteenth century, and there are no classes or types at all dated later than that. First, these percentages of Sparse Glazed Ware are quite high, as generally medieval excavations do not return so many fine wares: this might be related to an increased demand for fine wares from the end of the twelfth century onwards. However, with the Sparse Glazed Ware being the only in-phase fine ware, it was crucial to date the types in order to determine the exact production: most of the recognizable sherds were parts of jugs. In particular, the most numerous types are the ones identified by Ricci as types 106 and 110 in the ceramics assemblage of *Cuneo XXXVI* (Fig. 40).[316]

[316] All the types named "Ricci 2002 [...]" refer to Ricci, 'I reperti archeologici del sottoscala'.

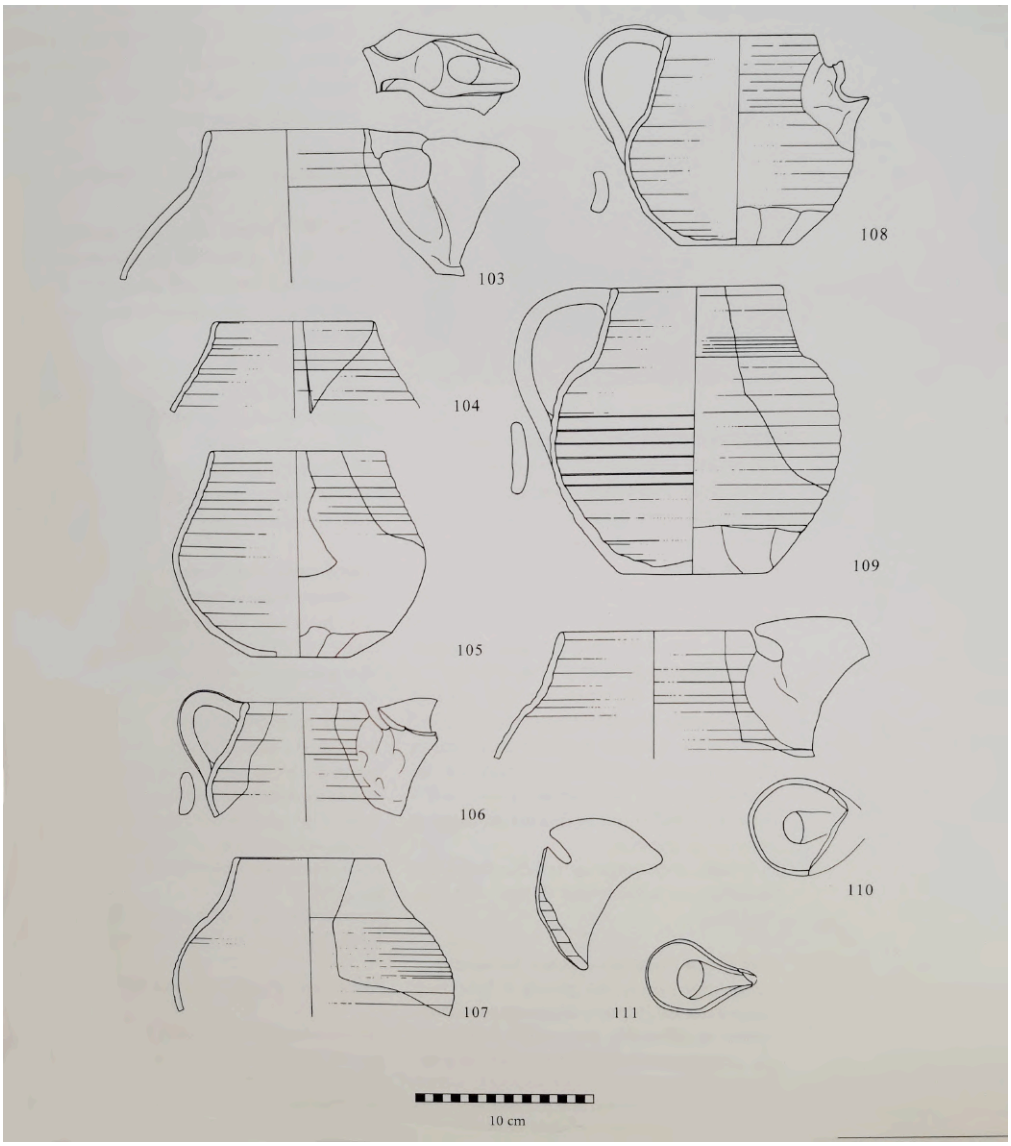

Figure 40: Jugs types from Cuneo XXXVI. (Source: Ricci 2002, Fig. 15, p. 357)

These jugs are important, since they are characterized by an extremely thin glaze, and the types are the same as some Common-Ware jugs, most likely produced by the same artisans between the end of the twelfth and the early thirteenth century.[317] In addition, other forms were produced: some sherds of bowls/lids are typical as well of this latest production - e.g. types Ricci 2002, nn. 89, 90 and 91), as well as some small glazed pots (as the types Ricci 2002, nn. 92 and 94. Furthermore, as expected from the Sparse Glazed jugs, among the Common Ware it was possible to recognize some similar jugs, such as the types Ricci 2002, nn. 112, 115 and 118, which are

[317] Ibid.

almost identical to their fine wares equivalent, thus confirming what just explained above. There were also some sherds of the typical medieval amphorae, used either for the conservation or the transport of liquids/food. These amphorae are easily recognizable due to their large handles that generally go beyond their narrow mouths: in this assemblage it is possible to identify the types Ricci 2002 nn. 221, 223 and 225, so the immediate comparison comes again from *Cuneo XXXVI*. Finally, this class returned as well some amphorae lids, typical of the late twelfth-century production, such as the types Ricci 2002 nn. 248 and 250, often associated with the amphorae just analyzed.

As for the Cooking Ware, it is possible to recognize a variety of forms and types: the most common form is the cooking pot (*olla*), and most of the types recognized (types Ricci 2002, nn. 21, 22, 26, 27, 31, 33, 34, 37 and 39) are dated from the second half of the twelfth century to the first half of the thirteenth, with the earliest types of the early twelfth or even the late eleventh century (but they are obviously residual here). This class features as well some *testi* for bread cooking (types Ricci 2002, nn. 6 and 7) and some lids (types Ricci 2002, nn. 63, 79, and 86).

In conclusion, the ceramics from this phase are really well-defined as a late twelfth-century group, where the percentage of the ceramics contemporary with the layers is higher than the percentage of residual ones, comparing both the amount of fragments (67% in-phase and 33% residual) and their weight (62% in-phase and 38% residual). As mentioned above, during the first half of the thirteenth century there was the first archaeologically visible reuse of the internal *crypta* of this *cuneo*, as this was the phase of both the so-called counter at the back wall and the hearth. At the same time, the whole external area was covered by some huge deposits, which contained copious amounts of materials: the ceramics alone amounts to 4,069 sherds, of which almost 40% were residual ancient classes, while both Forum Ware (314

fragments, 7.7% of the total) and Sparse Glazed Ware (1,043 fragments, 25.6% of the total) must be considered residual as well.

As for the in-phase ceramics, both Common Ware (15.1%) and Cooking Ware (12,44%) returned types typical of the production of the first half of the thirteenth century. At the same time, there are also some fragments of later classes, such as Majolica dated to c.1450-c.1600, but these sherds must be considered as intrusive from the upper layers, and it is significant that they were found in the highest medieval layer. In general, it is crucial to stress the homogeneity of the forms produced during this period, as the most common in this assemblage are again amphorae, lids, cooking pots and *testi*, without huge innovations: this demonstrates the continuity of the utilitarian forms, but it shows as well the limits of the chronological definition of the contexts depending only on the non-fine wares. Moreover, as the level of fragmentation of these sherds is extremely high, making it difficult to recognize the types. By contrast, the *crypta* contained several small layers, and in total 251 sherds were found. Despite the fact that this is a small assemblage, we can date it to the first half of the thirteenth century: the presence of both Green Glazed Ware (1 fragment) and Latium Ware (6 fragments, all jugs) show the difference between this phase and the previous one. Here the percentage of thirteenth-century classes is far lower than the other early thirteenth century levels: most likely, this indicates that when these layers inside the *crypta* were created such classes had just started to circulate, thus they were not as common as for other layers which were created some years afterwards, and as a consequence the chronology of these layers is clearly the early part of the thirteenth century. In fact, even the Common Wares had some sherds with features typical of the central medieval productions, as a bottom decorated with red spirals (1 fragment), and the presence of the pan, a form that was not produced yet during the Early Middle Ages.

Finally, the evident chronological change between the external fills and the internal layers points to a slight difference in the creation of those two spaces, or at least, to a variety of uses, which influenced the presence of the latest glazed medieval classes (found just inside the *crypta*).

During the second half of the same century, especially the internal area was affected by several changes, as the creation of the new "counter", and as a consequence the archaeological layers of this phase have been excavated all in the *crypta*, while the external area most likely remained at the same level as before. The archaeological layers for this phase were quite consistent, containing 1,184 fragments, including central medieval fine wares, such as Latium Ware and Green Glazed Ware, and some other later late medieval classes, such as Archaic Majolica and Glazed Cooking Ware, which were both produced from the end of the thirteenth century. In general, all the layers for this phase excavated in the internal area returned at least one or two sherds dated to the thirteenth century, which progressively increased. Thus, this coherent introduction of new classes and types confirms our chronology: in fact, despite the distance between the various transformations being short, luckily the archaeological materials are very clear about when those transformations happened, at least regarding these late twelfth and thirteenth century phases. After that, we see a second phase of spoliation, but the ceramics are very fragmented, and most of the sherds are residual, thus it has been possible just to date it after the end of the thirteenth century.

In addition, in the monograph regarding the latest excavations (2012-2017), these pottery data have been compared to information from the vitreous fragments. Accordingly, we can now reconstruct more accurately the activities that took place in *Cuneo X*. In fact, as for the ceramics, the most recent glass fragments in the corridor can be dated to the end of the twelfth century, such as for the typical central medieval glasses decorated with the so-called *bugne* (prunts applied at the base).

Here too, the scarce early medieval fragments are residual. Again the level of fragmentation is really high, as we have seen about the ceramics. So, clearly the glass confirms what we have analysed for the ceramics, especially regarding the chronology of the main central medieval phases of this *cuneo*.

The comparison between the pottery from the internal *crypta* and from the external area has produced some interesting results about the reuse and the life of this area during the Middle Ages. The first important element is the high level of fragmentation, which we have observed both in the pottery and in the glass. But, the amounts of residual fragments in the *crypta* and in the corridor are different: from the latter there is a large amount of residual pottery, and in some cases it is even equal to the pottery in phase. Furthermore, if we consider the volumes of these strata, their formation seems to differ, since the layers in the *crypta* are mostly smaller than those in the corridor, so they were probably related to different actions. As a consequence, while the pots from the *crypta* are likely to be in their primary context, on the opposite side the corridor's assemblage is characterised by large earth fills, and in Chapter 7 we will see that they have an extremely high level of brokenness. Finally, the internal area is characterised by some evidence of occupation, such as the hearth and the counter, and slightly later pottery classes, while the external area lacks such evidence, and the ceramics date to less than half a century before the assemblage of the internal area: these general features might indicate that the function of the external area somehow related to the internal area, so even the absence of the latest fine wares can be easily explained, if we suppose that the external area as a passage to the close internal space.

Comparison with *Cuneo IX* reveals evident differences. First of all, while the fragmentation of sherds is high for both the cases analysed, the ceramics from *Cuneo IX* are definitely scarce compared to the thousands of sherds excavated in *Cuneo X*. This may depend on the nature of the archaeological layers, but at the same time it is

clearly related to the different extent of the transformations that affected these areas during that period. In fact, in *Cuneo IX* the changes were fewer, as this space maintained the same functions for longer. By contrast, in *Cuneo X* the transformations were continuous, especially if we consider that most of the phases lie between the end of the twelfth century and the end of the thirteenth. Moreover, the archaeological evidence of the wall dividing these *cunei* is extremely interesting, if we consider the medieval vertical division of the Colosseum into "wedges", each one possibly rented by different people. The removal of the archaeological layers predating the late twelfth century obviously affects our possibilities of reconstruction, especially because it basically involved the whole Colosseum, but the hypothesis that those different transformations were caused by different people reusing those spaces is intriguing. As for the ceramics, the assemblages make sense together, and there are no doubts about the chronology of these contexts: in particular, the presence of the latest production of Sparse Glazed Ware, and the progressive introduction of the later medieval fine wares, are clearly exemplified by the several layers excavated. In fact, the ceramic products found here are chronologically clear, being produced exclusively during this period.

As regards the residual early medieval pottery, some considerations have to be made. As discussed in Chapter 3, knowledge is low about those early medieval products in Rome. But the presence of Forum Ware as a residual class in the contexts here analysed is an important clue to the spread of this class in the city: generally the huge fills, such as the ones excavated in the external area of *Cuneo X*, are characterised by the presence of many common materials, such as ancient amphorae, common wares, animal bones, slags. It is therefore clear that if Forum Ware is part of these huge fills, where normally it is represented by decent percentages of sherds, this could mean that it was quite easy to obtain. By contrast, other kinds of early medieval finds, such as glass, are not as common: if we consider that the presence of considerable amounts of glass has been viewed as a sign of upper-level classes, such

as in the case of the dwellings found in the Forum of Nerva, so the relatively common diffusion of Forum Ware appears even more striking.[318]

In conclusion, the ceramic assemblages excavated in *Cuneo IX* and in *Cuneo X* of the Colosseum are crucial for defining the reuse of this part of the building after the ancient period. Unfortunately, the early medieval phases are lost, but the late twelfth and thirteenth-century phases are well represented, adding important data to the knowledge of the Colosseum and Rome during that chronological frame. In fact, as explained above in relation to the numerous excavations inside the Colosseum in the last thirty years, this central medieval phase is really well represented, as most of the *cunei* returned large amounts of late twelfth-century and thirteenth-century ceramics. In addition, most of the measurable parts found in both *cunei* are types firstly studied in the massive context excavated in *Cuneo XXXVI* and studied by Ricci,[319] and, as a consequence, most likely the thousands of sherds which are part of the fills just analysed originally came from one or more of the medieval settlements inside Colosseum itself. In particular, the most immediate comparison to *Cuneo X* is the assemblage of *Cuneo XXXVI*: while the types are the same, the clear difference is related to the very high level of fragmentation of *Cuneo X*'s assemblage, but this is clearly the consequence of the different kinds of archaeological deposits from which the ceramics originally came – as *Cuneo XXXVI* was an intentional pit containing almost complete vessels.[320] Either way, all the ceramics found during the excavations briefly analysed above are very similar to this latest one, as all of them describe the thirteenth century phase of reuse of Colosseum.

As regards to the other archaeological contexts in Rome dated to the twelfth and the thirteenth century, there are data from numerous intentional pits with "a fiasco"

[318] For the finds from the dwellings, see Chapter 4.
[319] See note 91.
[320] Ibid.

shape, like that found in front of *Cunei XXV* and *XXVI* and described above; they were originally used for preserving food, especially as grain storage. Later these were used as rubbish pits. From the analysis of the medieval pits found in Roman Forum, in the area of Temple of *Concordia*, and studied by Orietta Follis[321], the ceramic assemblages are extremely similar to those of the Colosseum: those similarities are significant especially if we look at the Common Wares, characterised by the presence of the jugs directly originating from their Sparse Glazed equivalents.[322] Moreover, the variety of forms resembles the context excavated in *Cuneo X*, as there are jugs, amphorae, amphora bases, lids, and lamps. Similar statements can be made about the medieval pit found in the area of Largo Argentina, or ones excavated on the Palatine hill, all dated between the twelfth and thirteenth century. In addition, the well-known *Crypta Balbi*'s context generated thousands of sherds dated to the same period: again the morphological and typological similarities are extremely clear, which confirm the great standardisation that characterized the central medieval productions circulating in Rome.

5.6 - Current Excavations: Preliminary Analysis of the Ceramics

Finally, before relating recent data from excavations to the medieval use of Colosseum, we can briefly analyse the data from the current excavations, taking place in the external area of Colosseum, just outside *Cunei IX* and *X*, originally the first and the second corridor.[323] In general, the archaeological layers are dated between the classical and the modern period, and the finds are extremely heterogeneous. During the first archaeological campaign in 2016, the excavation took place in the area of the first corridor of Colosseum, and the ceramics comprise 3,045

[321] See O. Follis, 'Butti medievali nel tempio della Concordia al Foro Romano. Il materiale ceramico', in *Archeologia Medievale*, 15, 1988, p.561.
[322] For these types of jugs, see Section 5.5.
[323] See M. Crocchianti *et al.*, 'Gli scavi nella Piazza del Colosseo', in Facchin-Rea-Santangeli, *Anfiteatro Flavio*, note 6, pp. 105-108.

sherds, of which the most substantial group dates to the tenth to late eleventh century. In 2017 the excavation focussed on the area between the first and the second corridor, where the pottery totals 2,774 fragments, very bad preserved, but mainly dated to the late twelfth to the thirteenth century. It is crucial to stress that the data here presented are absolutely preliminary, and the typological analysis of the sherds has not been done yet. The absence of substantial early medieval materials is no doubt related to the massive spoliations often mentioned, but at the same time it helps dating the collapse of the outermost corridors of Colosseum. In fact, this collapse has not been dated yet, despite the importance of such event in order to understand the post-ancient arrangements of the building. In a recent work about the major earthquakes that hit Rome between ancient and modern times,[324] the suggestion is that the massive earthquake that caused the collapse of the southern part of Colosseum was that of 1349. In particular, some fourteenth-century and fifteenth-century representations of the building have been used as proof.

Yet this hypothesis disagrees with the recent hypothesis regarding the structure of the Frangipane's *palatium*, given that its recent reconstruction considers the southern part as already collapsed. In addition, the latest excavations have not returned evidence of such a massive collapse, and by contrast the archaeological layers contain numerous production slags, most likely related to metalwork.[325] It is certain that the ruins were removed, but the issue is related to when that did happen. The latest archaeological layers lack ceramics of the twelfth to the fourteenth century, but are full of tenth- to eleventh-century Forum Ware. Assuming that the earthquake that destroyed this part of the building happened in 1349, it is clear that the archaeological layers and consequently the ceramics were removed together with the

[324] See P. Galli, D. Molin, L. Scaroina, 'Tra fonti storiche e indizi archeologici. Terremoti a Roma oltre la soglia del danno', in *Rivista Dell'istituto Nazionale d'Archeologia e Storia dell'Arte*, 62-62, anno XXX-XXXI, 2007-2008, (Pisa-Rome, 2013), pp. 9-32.

[325] At the moment, given the absence of any typological analysis, I have dated this productive phase between eleventh and thirteenth century, but this is only provisional.

ruins, thus explaining the absence of the ceramics almost contemporary to the earthquake.

However, another hypothesis is that it was not the 1349 earthquake that destroyed this side of the Colosseum: the *Liber Pontificalis*[326] mentions at least two very destructive earthquakes during the ninth century, archaeologically confirmed by some excavations, such as for the latest excavations in Piazza Venezia, which contained an important assemblage of Forum Ware.[327] The first analysis of Colosseum ceramics seems to confirm that the earthquake happened during the ninth century, but the most recent data from the excavations (September 2018) point instead to a fourteenth-century chronology: only in this way it would be possible to explain the presence of tenth century Forum Ware and the complete absence of both evidence of a collapse and of ceramics contemporary with the fourteenth-century earthquake. In fact these ceramics should have been at least partly sealed by the earthquake, as they were at Piazza Venezia. However, as said the excavations in this external area are still ongoing, thus these hypotheses must be considered provisional only.

5.7 - The Colosseum and Rome

The overall analysis of the excavations that have taken place in Colosseum over the last thirty years enable us to synthesize the main events that involved this complex during the Middle Ages. In fact, thanks to the archaeological excavations we can confirm phases of reuse otherwise just partially known from the written sources.

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[326] L. Duchesne (ed.), *Le Liber Pontificalis. Texte, introduction et commentaire*, I-II, (Paris, 1886), II. p. 9 and 108.

[327] De Luca, note 74; M. Serlorenzi, 'Le testimonianze medievali nei cantieri di Piazza Venezia', in R. Egidi, F. Filippi, S. Martone (eds.), *Bollettino d'Arte del Ministero per i Beni e le Attività Culturali, Volume Speciale, Archeologia e Infrastrutture. Il tracciato fondamentale della linea C della metropolitana di Roma: prime indagini archeologiche*, (Rome, 2010), pp. 131-165.

The most consistent phase is dated between the late twelfth and the thirteenth century, since almost each excavation returned a consistent series of layers dated to that period. As for *Cuneo IX* and *X*, the reuse of these different spaces ended up differently (Fig. 41):

- the *crypta* in *Cuneo X* was occasionally inhabited during the thirteenth century, while the corridor of this *cuneo* was likely to be used as the access to the actual *crypta* – thus explaining the few fragments found there dated to the thirteenth century.
- During the same period, *Cuneo IX* was reused as well, although the archaeological evidence is scarcer. The different layout of this space influenced the reuse; moreover, we know that the original spaces of the amphitheatre were divided between multiple owners and tenants. In this case, the remains of the wall between the corridors of *Cuneo IX* and *X* clearly confirms this multiple division of the available spaces.

Figure 41: Hypothetical reconstruction of Cunei IX (right) and X (centre). (Source: Facchin *et al.*, 2018, Fig. 1, p. 19)

However, the most striking result of this overall analysis of the excavations is that the twelfth-to thirteenth-century phase is well documented for most of the *cunei* analysed, despite the archaeological contexts being so heterogeneous, as some of them were *cryptae*, some were intentional pits, and so on. For example, *Cuneo XXXVI* returned one of the most important collections for the study of the central medieval ceramics in Rome, but at the same time the typological similarities with the other assemblages found in Colosseum itself are impressive. The various ceramics assemblages are extremely similar each other, and often the impression is that the huge fills, such as the ones in *Cuneo X*, used the wasted ceramics found nearby. From a general point of view, such a well-organised process of recycling materials and the spaces is not possible without someone being in charge of the monument.

As seen, the earliest documents regarding the Colosseum are dated to the eleventh century, and most likely at that time most of it was part of the properties of S. Maria Nova church; the Frangipane as well are mentioned as owners of some *cryptae*, but their importance is particularly related to the presence of the *palatium*. But the archaeological evidence for this kind of building is extremely scarce, firstly as a consequence for the continuous transformations and rearrangements that affected it. However, key is the interest about the Colosseum from such important owners, as it still demonstrates the relevance of this building in medieval Rome. In addition, we must stress that both the documents and the archaeological evidence are silent about the period before the eleventh century; archaeologically, before the excavation in *Cuneo XXXIII*, dated between the seventh and ninth century, the only evidence for that period came from residual materials, quite common in each assemblage analysed. Unlike *Vicus ad Carinas*, where the later medieval phases are absent because of the almost complete abandonment of the area, such a reason is not likely at all for the Colosseum, which remained an important part of the city during every period up

to the mid-fourteenth. As a consequence, the absence must be considered as related to the new layouts of the area. Moreover, if the hypothesis regarding the ninth-century earthquake is true, the sizeable rearrangement of the area is even more likely, and such an action surely included the removal of huge amounts of ruins, fills, and materials. In fact, during the Middle Ages the reuse of ancient monuments through the change of their original function was common and first of all the ancient monuments became quarries for recycling precious and reusable materials such as marble and travertine. In addition, empty non-functional places started to be used again, obviously in different roles.

As we saw for the Imperial Fora as well, there are many instances of the further reuse of ancient monuments, and the excavations in Rome often allow unexpected historical reconstructions – notably the numerous medieval *domus* that have been found in the Fora. However, even the cases of reuse give no certain proof of the use of those spaces as actual dwellings. Moreover, the written sources also use different words for the properties inside the Colosseum: some are described as *cryptae*, while some others *domus*. It is clear that the distinction in the use of those two words is crucial in order to understand the different forms of reuse of the spaces within the Colosseum. In his brilliant analysis of the urban spaces of Rome, Étienne Hubert identifies the *cryptae* as the spaces already existing from previous classical buildings.[328] Some *cryptae* are even mentioned as part of some *domus*, such as the *domus solarata cum cripta sinino coperta sub se*[329] mentioned in the S. Maria Nova's documents. As explained by Santangeli Valenzani, the scarce archaeological evidence for medieval dwellings in Rome, confirm Hubert's work based on the written sources, but the *cryptae* excavated in the Colosseum are the first of this kind, and even the archaeological evidence is

[328] Hubert, *Espace urbain,* pp. 170-171.
[329] *Annales Camaldulenses*, t. 1, appendice, n. 85, mentioned in Hubert, *Espace urbain*, p. 171.

faint.[330] However, the hypothesis that they served as functional spaces as well, such as storages and stables, agrees with the image of this area as it has described in another document, the *Liber Censuum*, dated to the twelfth century and recently analysed by Chris Wickham.[331] In particular, the section of this text describing the Easter procession is enlightening about the twelfth-century topography of this area, given that lots of houses along the *Via Sacra* are cited, together with their owners. Then, when the procession arrived near the Colosseum, the difference in terms of density is impressive, as fewer houses are mentioned. Santangeli Valenzani sees this as a proof of the prevalent functional use of the *cryptae* of the Colosseum, rarely used as actual dwellings. Even the huge ceramic assemblage found in *Cuneo XXXVI* is the result of an intentional pit, so it provides no information about the presence of a dwelling there. Given that, what about the *domus* that the documents cite also within Colosseum? Most likely, some actual dwellings occupied the higher levels of the building, in similar fashion to the later reoccupation of Theatre of Marcellus - but the absence of any possible medieval archaeological layer from the upper levels of the Colosseum affects our understanding, as does the absence of clear evidence for stairs.

Finally, as for the people who actually reused the spaces inside Colosseum, while it is not possible to clearly identify them, at least some general assumptions can be made starting from the ceramics. From our analysis of the available data from past excavations, we see both Sparse Glazed Wares and Common Wares extensively used. Both the pit (*Cuneo XXXVI*), and the huge fills (*Cuneo X*) contained thousands of sherds, despite having totally different states of

[330] R. Santangeli Valenzani, '*In ampiteatrum quod nuncupatur Coloseum*. Il Colosseo nel Medioevo: dalla microstoria alla storia urbana', in Facchin-Rea-Santangeli, *Anfiteatro Flavio*, pp. 14-24.
[331] Wickham, *Medieval Rome*, pp. 344-359.

preservation.[332] Apparently Sparse Glazed Ware reached almost the same accessibility as Common Ware, indicating they were both probably produced by the same *ateliers*. In addition, the high level of standardisation of such classes demonstrates that they were in demand. As for Cooking Ware, it is more complicated to follow changes because they happened slowly, this class being characterised by some continuity in the forms produced, but the number of fragments for this class also is incredibly high. Finally, the imported ceramics and the central medieval glazed ceramics, such as Latium Ware and Green Glazed Ware, are fewer than the other classes. Given that the assemblages found are mostly dated between the end of the twelfth century and the first half of the thirteenth, it makes sense that those classes had not gained as wide distribution as those already circulating in Rome for at least two centuries. At the same time, the thirteenth century represents itself a great moment of innovation for the **ceramic technology**, but this does not mean that it happened quickly – in fact, only by the end of the thirteenth century did the new tin-glazed production reach levels of spread not seen before. Thus, most likely the people who produced such archaeological deposits and probably used the *cryptae* were part of the medium élites described by Chris Wickham,[333] as is confirmed as well by some more prestigious names recognised from documents, notably the Frangipane family.[334] The few "luxurious" productions found are glass vessels, such as ones decorated with the so-called *bugne* and some decorated with a black filament found in the fills of *Cuneo X*.[335] Given their scarcity, this does not contradict what was said above, because their percentages are very low compared to the amount of more "common" materials found, such as glazed products. The presence of good quality and "luxurious" glass productions can probably be related to some

[332] See notes 91 and 323.
[333] See Wickham, *Medieval Rome*, pp. 261-267
[334] See Greco, 'L'insediamento medievale attraverso i dati di archivo'.
[335] See Colangeli, 'I materiali vitrei dei cunei III, IX e X'.

prestigious people living nearby, such as the Frangipane, or even relate to the S. Maria Nova church. Obviously, both the nature of the documents and the archaeological evidence prevent similar assumptions for the centuries before the twelfth century.

Chapter 6
Fourteenth-Century Ceramics and the Church of S. Omobono

6.1 – Introduction

As discussed in Chapter 2, from the thirteenth century onwards tin-glazed fine ceramics started to circulate widely in Rome, wholly replacing the Sparse Glazed Wares. While Latium Ware and Green Glazed Ware were locally made, and their features were still "mixed", by the end of the same century those classes were replaced again, when Archaic Majolica started to circulate. From that point, Archaic Majolica became the most common fine ware circulating in Rome. The main reference collection of tin-glazed ceramics from Rome is, again, the *Crypta Balbi* assemblage, but at the same time various other excavations have generated thirteenth-and especially fourteenth-century assemblages.[336] In this chapter the focus is the assemblage found in the church of S. Omobono, in the area of Tiber Island, excavated during the 1980s (Fig. 42).

Unlike the sites analysed before, for S. Omobono most of the data come from the ceramics, as other elements of the archaeology were less well-recorded. Moreover, this site differs from other case studied in terms of stratigraphic analysis, and how it was excavated, as in this case we lack stratigraphic information. Thus, this chapter will first introduce the ceramics circulating in Rome during the fourteenth century, and then using the ceramic data in order to suggest a history of this small site's use in the medieval period, and it can be considered an experiment on quantification

[336] In particular, see *Crypta Balbi 5*.

methods, as one aim is to gather as much information as possible from ceramic analysis, as ceramics form the only almost complete data set.

Figure 42: The church of S. Omobono in 1930s; the excavation inside the church took place only in the 1980s. (Source: Brocato *et al.*, 2018, Fig. 12, p. 131)

6.2 – The History and the Written Sources

The S. Omobono church was built in the area of the river harbour of Rome, known as *Forum Boarium*, on the left bank of the Tiber, between the Capitoline, the Palatine and the Aventine. This building is part of a wider archaeological site, which was first excavated in the 1930s, during the Fascist demolitions (Figs. 42 and 43).[337]

[337] The most recent analysis of the *Area sacra* is in P. Brocato, M. Ceci, N. Terranato (eds.), *Ricerche nell'area dei templi di Fortuna e Mater Matuta I*, (Arcavata di Rende, 2016).

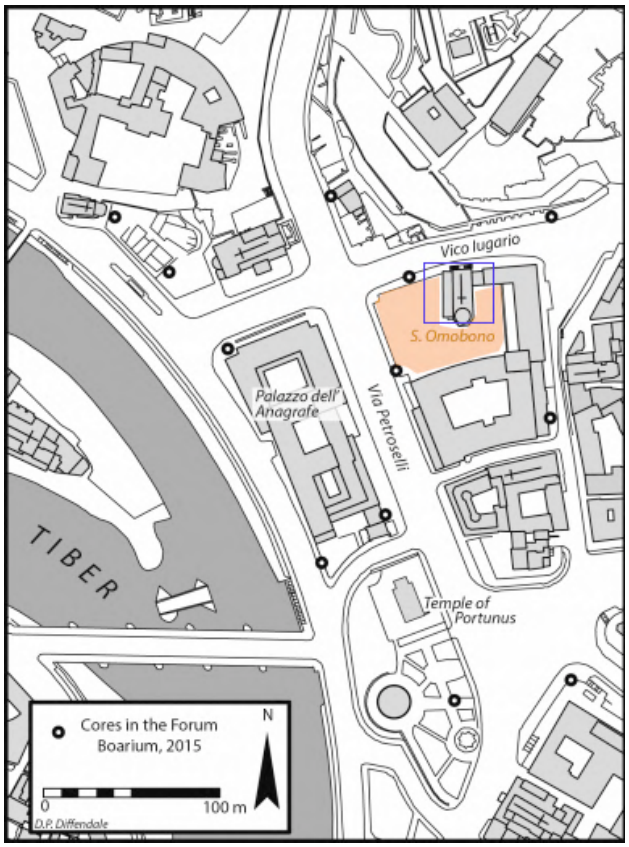

Figure 43: Location of the church of S. Omobono (Source: Brocato *et al.*, 2018, Fig. 2, p. 13; re-editing by L. Campagna)

This church was spared because of its artistic value, and because of a failed plan to restore it in order to make it part of the Museum of Rome. The present church was built in the fifteenth century, but in the 1930s the excavators had already recognised that there were ancient ruins underneath it: the actual site was discovered in 1936, during the construction of the road that still connects the city to the sea, the Via del Mare. At that time, the surroundings were totally excavated in order to fully show the ancient temples, but they decided to preserve the church from demolition and to reinforce the building itself. As a consequence, given the importance of the temples found there (dedicated to Fortuna and Mater Matuta), whose first phases have been dated to the Roman Republic (between the end of the sixth to the first century BC), they were extensively studied and the so-called *Area sacra* (Sacred area, Fig. 43) is well known. By contrast, the church still remains less studied (Figs. 44 and 45).

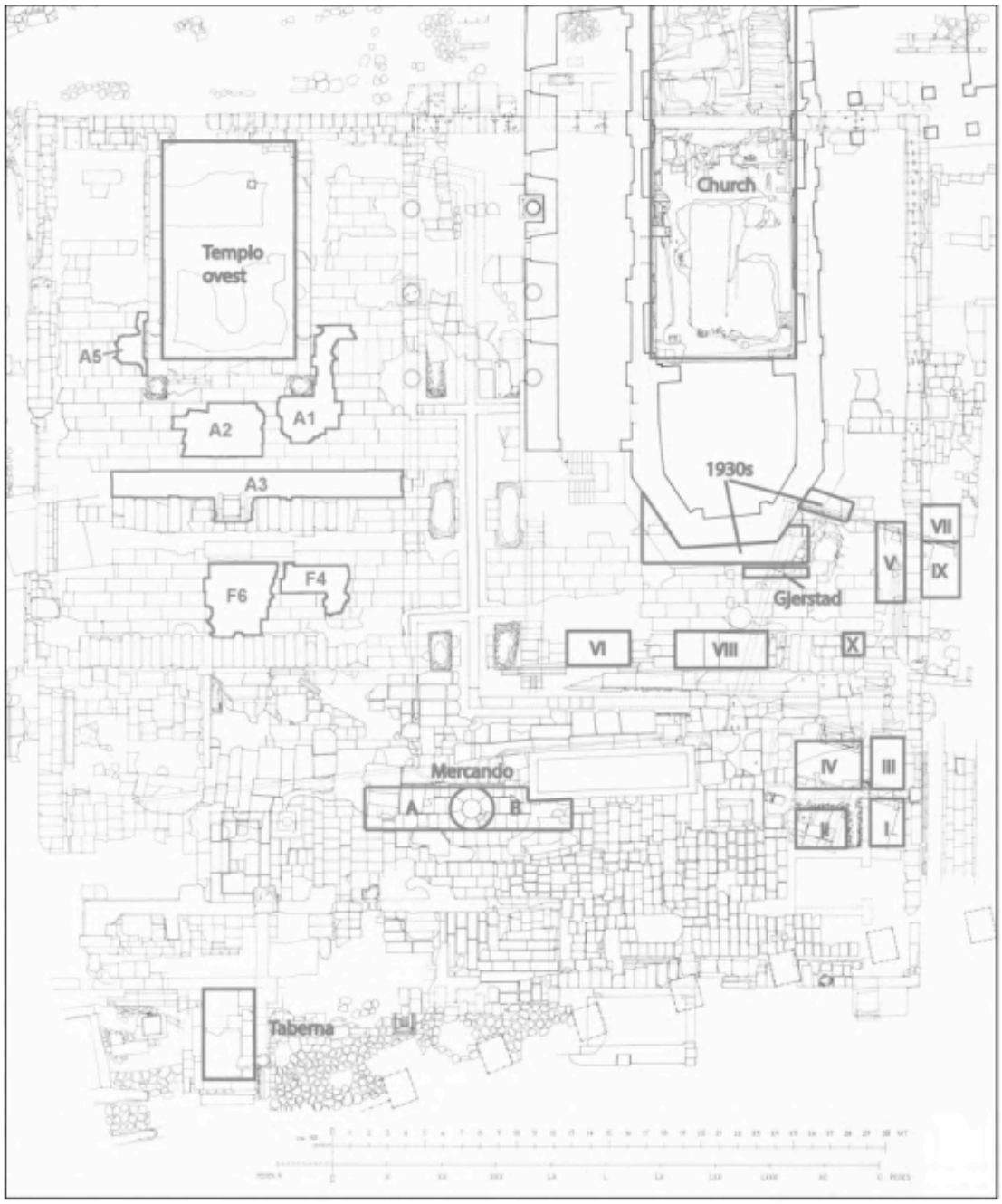

Figure 44: Plan showing the position of the church in the *Area Sacra*. (Source: Brocato *et al.*, 2012, Fig. 4, p. 14)

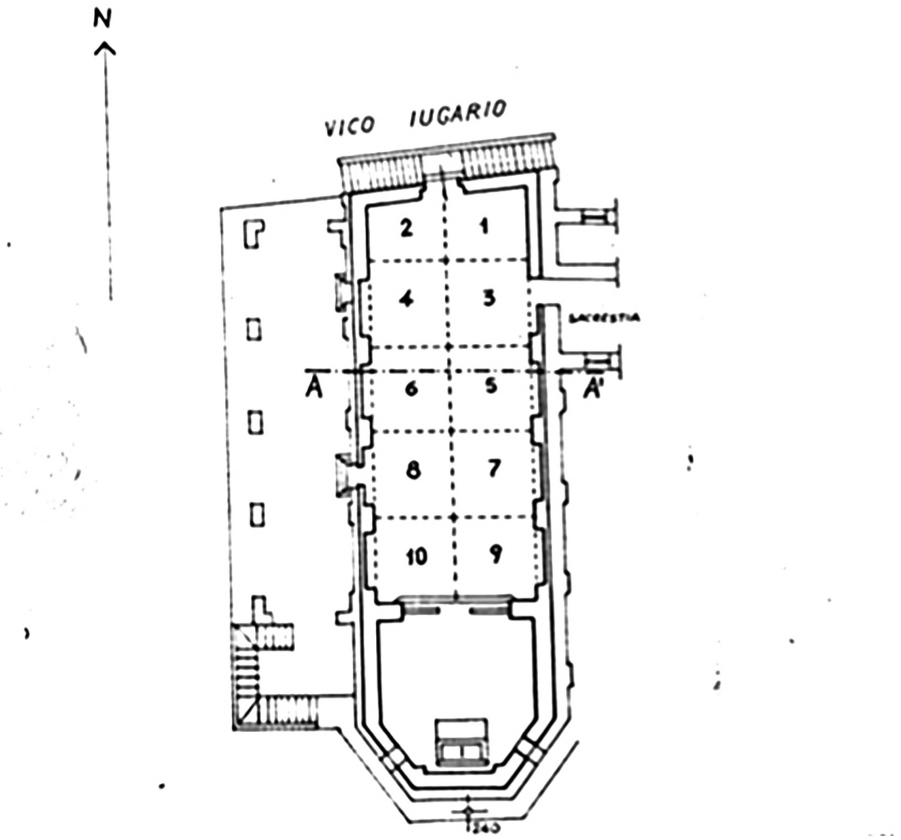

Figure 45: Plan of the church of S. Omobono, showing how the site was divided during the 1980s excavations. (Source: Brocato *et al.*, 2018, Fig. 2, p. 179)

From one of the few articles about the church, it seems that before the reinforcement of the Renaissance building, Richard Krautheimer, while visiting the site, at that time being excavated by Antonio Maria Colini, dated what remained of the external wall of the church to the ninth century.[338] This was important because, at that time, it was the only evidence of the early medieval phases, given that the excavations inside it started later. Even the written sources mention the church no earlier than 1482, referring to a "new" church, built above the previous one and still surviving today. We learn that Stefano Satri wanted to rebuild the church that was there, totally

[338] See A. M. Ramieri, 'Nuovi scavi nella chiesa di S. Omobono', in *Ecclesiae Urbis. Atti del Congresso Internazionale di studi sulle chiese di Rom*a, (Rome, 2002), pp. 565–578.

destroying the earlier phases of it.[339] It is therefore clear that little is known about the building that was destroyed, or about the phases before the Renaissance one. In particular, while there are no doubts about its continued use from the classical to the modern period, one main issue regards the original name of this church, since before the building was named after S. Omobono in 1575, there is nothing certain about its dedication, which could have been either to S. Maria or to S. Salvatore. In fact, as explained by Monica Ceci, through the analysis of the written sources it has been possible to identify S. Omobono church as the former S. Salvatore *in Portico*, which before the thirteenth century was dedicated both to S. Salvatore and S. Maria, with the latter more important that the former. As a consequence, Ceci has demonstrated that before the thirteenth century this church was known as S. Maria *in Portico*, and its name changed to S. Salvatore in *Portico* only from the second half of the thirteenth century, when owners of the hospital nearby, which was founded in the twelfth century by Celestine III, decided to build a new church dedicated only to S. Maria. This change of dedication is one of the reasons why the history of this church is little known. At the same time, if we consider both the long use of this church and, as will be explained in Sections 6.2 and 6.3, the archaeological evidence of numerous phases before the Renaissance phase, the importance of new analysis of this church for the topographical reconstruction of the whole area is clear.[340]

[339] The most recent analysis for the church is M. Ceci, 'S. Salvatore in Portico e il quartiere produttivo. Spunti di ricerca sul paesaggio post antico nel Foro Boario', in Brocato-Ceci-Terranato, *Ricerche nell'area dei templi*, note 337, pp. 103-140.

[340] The whole re-analysis of this site has started in the occasion of new volume: see in L. Campagna, 'La chiesa di S. Omobono. Verso un riesame delle stratigrafie e dei reperti', in B. Brocato, M. Ceci, N. Terrenato (eds.) *Ricerche nell'area dei templi di Fortuna e Mater Matuta (Roma), II*, Università della Calabria, (Arcavacata di Rende, 2018), pp. 177-190.

6.3 - The Excavations and the Archaeological Reconstruction

The archaeological excavations inside the church of S. Omobono took place between 1985 and 1989.[341] However, from the archaeological reports it is still unclear how these excavations proceeded, thus compromising our analysis. Moreover, those reports are incomplete, and the original excavation diaries are still missing. The plan above (Fig. 45) is one of the few original documents available, and it shows how the area inside the Renaissance church was divided up during the excavations. Unfortunately, it is unclear whether they excavated in the order of the numbering or not.[342] As a consequence, one of my aims is to reanalyse this site using any available written sources, archaeological data, especially the ceramics, in order to gain a more detailed history of this site.

Each area had a different number of layers, which have been identified using the finds reports, even if it is impossible to know their exact position and depth. Furthermore, our plan gives no reference to the area behind Areas 9 and 10, which was excavated between 1989 and 1999. In contrast, the few articles published after the excavations are quite detailed as regards the archaeological evidence still *in situ*, and thus they are crucial in order to fully understand the changes that affected the church during the centuries.[343] In fact, inside the church there are various archaeological remains of the pre-Renaissance church, i.e. the floor levels and the paintings still *in situ*.[344] As for the floors, during the excavations they found three different floors (Fig. 46), one of which resulted from the re-use of a previous one.

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[341] See note 338; A. M. Ramieri, 'Chiesa di S. Omobono, ultimi rinvenimenti', in *BCom*, 106, 2005, pp. 399-413; A. M. Ramieri, 'La chiesa di S. Omobono alla luce delle nuove scoperte', in *Atti della Pontificia Accademia Romana di Archeologia (Serie III). Rendiconti*, volume LXXVII, (Vatican City, 2005), pp. 3-46.

[342] This plan was found among the scarce documentation available, but without any other kind of information.

[343] See note 339.

[344] The detailed description of these remains is in Ramieri, 'La chiesa di S. Omobono – nuove scoperte', pp. 25-41.

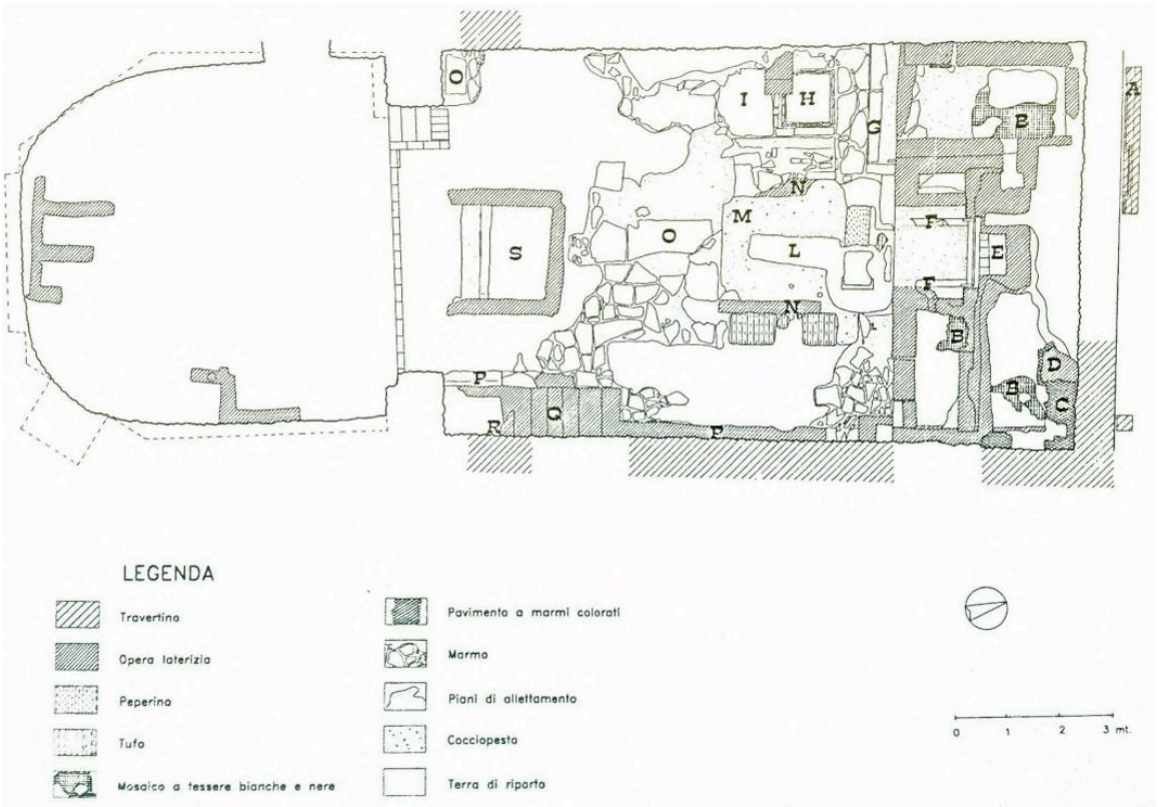

Figure 46: Plan of the church. (Source: Ramieri 2005, Tab. 1). Our interest are post-classical signs of reuse: (Q) indicates the stairs of the Romanesque campanile; (R) is where medieval paintings have been found; (C) indicates the fragment of Cosmatesque floor.

The first is a typical classical black and white mosaic, found on the very first archaeological levels of the building, and dated to the 1st century AD. The second one is more interesting for us, because it is a pavement made of colourful marble slabs and dated to the end of the fifth century, but reused later, as is possible to see on the eastern side, where the original marble slabs have been cut and rearranged. The importance of this floor is due to its early date, while, as regards its reuse, it is likely that it is related to a new arrangement of the church after the fifth century, the evidence of which is otherwise extremely scarce. The last floor is a Cosmatesque floor, datable to the first half of the twelfth century. In addition, from the reports of the 1930s, we know that on the eastern side of the church there was a Romanesque campanile, which was demolished on that occasion, but is still visible on some photographs of that period, as Ramieri explains.[345] Moreover, corresponding to it but

[345] Ibid.

on the inside of the church, it is possible to see remains of some stairs dated to c. 1080-1125, on which are some remnants of paintings dated to the first half of the twelfth century.[346] It is therefore clear how complex were the phases of this site, which was surely used almost uninterruptedly from the first century to the twelfth century, as demonstrated by the archaeological remains still *in situ*.

Moreover, after I visited the excavation again and did further research on the documentation available, new features emerged. First, it was possible to see some of the original photographs from the 1980s. From these pictures, an external wall is clearly visible, which had been used to divide the area (Fig. 45) into two different sections: one (Areas 1 to 4) was outside the ancient and the medieval building, while the other (Areas 5 to 10) was inside.

As a consequence, the dimensions of the building itself have to be re-considered, as the original building, used from Roman times until 1482, occupied only the southern part of the actual church. In addition, the analysis of the same images revealed the existence of some stairs, not represented on the plan. Apparently, these stairs occupied part of the areas one and three, thus connecting the church with the *Vicus Iugarius*,[347] but it is not really possible to date them just from the pictures, and without a new visit to the outside areas, we do not know whether or not they were removed during the excavations. However, the presence of these stairs means that the entrance of the church was already on the side of *Vicus Iugarius* during the Middle Ages, or at least before the construction of the 1482 church. Conversely, we know that the ancient temple's entrance was, instead, in the direction of the sacred area. The existence of the stairs is significant, as it confirms the importance of both

[346] In Ramieri, 'La chiesa di S. Omobono – nuove scoperte', p. 34, these paintings are described as "*...fasce affiancate di colore rosso e blu e del noto motivo ornamentale del velario, con fondo di colore giallo, utilizzato anche su un pilastrino decorato situato sul lato sinistro dell'edificio, in prossimità del presbiterio*", and they have been dated to c.1100- c.1150.

[347] For *Vicus Iugarius*, see note 199.

Vicus Iugarius and the church itself. In fact, on the one hand *Vicus Iugarius* has maintained its use, as like other roads, such as the *Vicus ad Carinas*. On the other hand, the church needed to be accessible from the road, meaning that it was still used enough to change the orientation of the building itself.

There are difficulties relating to what this evidence might mean. In particular, the fifth-century floor, made with precious and large marble slabs, is problematic because such valuable decoration and materials have to be associated with an important building, and it is hard to imagine renovation of a temple as late as the fifth century. At the same time, if we consider that the only kind of building that, in the fifth century, could easily be related to the use of such luxurious decorations is a Christian church, the hypothesis of the transformation of the ancient temple into a church is almost as problematic, because those conversions are usually dated not earlier than the seventh century in Rome. Some do exist, such as SS. Cosma e Damiano, in a corner of *Templum Pacis*, but that was an important foundation; if this church dated to the same period, we might have to suppose a similar importance, which is however hard to track from just the material record. Unfortunately, as noted above, the name of this church in its original phases is still unknown, and further research is necessary in order to solve this chronological issue. Nonetheless, the archaeological evidence clearly points to an early conversion of the ancient temple into a church.

Both the different floors and the presence of the stairs demonstrate that the church was used from the fifth century to at least the twelfth century, almost uninterruptedly. In addition, turning to the inside of the church again, the analysis of the 1980s pictures has also shown rubble from some kind of building collapse that was covering parts of Areas 5 to 8. More precisely, this rubble was in the middle of them, with an orientation N-S. Obviously, during the excavation this rubble was removed, so there were no traces of that before a reanalysis of the pictures, but the

presence of it is important because it could be related to the fall of the roof. In fact, it is possible to hypothesise that what is mentioned as destroyed by Stefano Satri in the written sources could be the original roof of the building – and that this was what the excavators found as rubble.[348] Again, more focused study would allow us to date this collapse and its remains, because they may mark moments in the different arrangements of the building between the fifth and fifteenth century.

6.4 – S. Omobono: The Ceramics

As noted, the site was divided into different areas (interior, exterior and crypt), and this separation will be maintained here, in order to analyse possible differences between the areas. In fact, it makes sense to consider such groups separately, in order to be able to analyse and then compare their features.

During the archaeological excavations more than 15,000 sherds were found, of which 92% were dated as medieval. Most of these finds have never been published except in an interim report, but for this thesis all the sherds have been counted again: 15,065, of which 8,761 are medieval or later, thus confirming that more than 90% of the ceramics are dated between the ninth (Forum Ware) and the fifteenth century (Renaissance Majolica).[349] Having so few residual ceramics is surprising, since sites in Rome are generally characterised by high percentages of residual finds. The classes of this assemblage include all the main medieval classes: medieval Common

[348] Unfortunately, at the moment we lack of sufficient detailed information about the 1980s excavation, so it is difficult to verify the extent of this rubble. Some information is in Ramieri, 'La chiesa di S. Omobono – nuove scoperte', pp. 25-30.

[349] It is clear that the amounts of ceramics do not correspond, as apparently the sherds stored now are less that the ones originally counted. In fact, 16,000 sherds have been counted for the partial publication of this collection mentioned above, but at the double-check of the counting returned 15,065 sherds. See M. Giustini, 'Appendice. Ceramica Medievale, Laterizi, Reperti Metallici, Oggetti In Osso E Monete', in *Atti della Pontificia Accademia Romana di Archeologia (Serie III). Rendiconti*, volume LXXVII, (Vatican City, 2005), pp. 79-121.

Ware (4,714 sherds), Archaic Majolica (1,335 sherds), medieval Cooking Ware (979 sherds), Forum Ware (441 sherds), and Sparse Glazed Ware (388 sherds), with a chronological range from the ninth to the fifteenth century. Here, the sherds have just been counted, as the measure of weight could have been affected by the bias consequent to the state of storage of the ceramics. Fortunately, the ceramics have been well documented, so it has been possible to recover the measurement of vessel rims, which are crucial for the quantification methods that will be explained in the next chapter.[350]

As noted, Areas 5 to 10 inside the medieval church, and, from a chronological point of view, the ceramics are in line with the available information about the construction of the church from 1482 (Figs. 44 and 45). The main classes are medieval common ware (1,818 sherds, 47.2%) and Archaic Majolica (769 sherds, 19.9%).[351] While for the first one of these, it is possible to date it depending on the main types represented, for the latter it is generally agreed that its diffusion in the Roman area did not start until the late thirteenth and the start of the fourteenth century. In addition, it is clear that both the Forum Ware (105 sherds, 2.7%) and the Sparse Glazed Ware (88 sherds, 2.3%) should be considered as residual ceramics in this site. This is not surprising: the church was in use continuously until the thirteenth century at least, and it makes sense that in the archaeological collections the classes typical of the periods of use are less represented - a point I will come back to. Yet, it is interesting that how scarce are the classical residual classes (236 sherds, 6.1%), such as amphorae, which are normally common in this kind of intentional fill, given their huge availability in the city of Rome, as I have discussed in the chapter about the Colosseum. In addition, while the medieval common ware is generally fragmented, the other well-represented class of this assemblage, Archaic majolica, is

[350] See Chapter 7.
[351] See Chapter 2.

generally well-preserved, and many of the vessels are intact, particularly bowls. As for the main forms from these areas, obviously some classes are really rich in their number, such as Archaic Majolica, while others, such as Forum Ware, are characterised by fewer forms, as expected.

Areas 1 to 4 were part of the exterior of the medieval church, facing *Vicus Iugarius*. These areas contained a high quantity of ceramics (7,719 fragments), which is surprising, given the smaller extension of the exterior compared to the interior. From a chronological point of view, the classes represented are almost the same as the ones from the interior, but their ratios are slightly different. The main class is medieval Common Ware (4,024 sherds, 52.1%), characterised by a long chronology as always. However, if we consider the main types, characterised by shorter and more precise chronologies, and compare them with the chronology of the other main class of this assemblage, Archaic Majolica (819 sherds, 10.6%), we can date this deposit to the fourteenth century. As just stated, the most numerous class here is medieval Common Ware, which is more than half of this assemblage. Both Forum Ware (480 fragments, 6.2%) and Sparse Glazed Ware (427 fragments, 5.5%), even if still residual, are more numerous here than in the previous group, and this is important, as they could indicate different ways of formation of this area. In fact, it seems that the exterior and the interior were filled in different ways, and, considering all the different features of these two groups of ceramics, it is possible to hypothesise how and when the church was abandoned. Finally, as for the previous group, the classes typical of the late twelfth and thirteenth centuries are almost totally absent.[352]

Finally, the so-called "post-1985" area includes almost thirty archaeological layers that were excavated between 1989 and 1999, during several archaeological

[352] I.e. Latium Ware and Green Glazed Ware.

campaigns. The main issue related to this area is the fact that, while it was, indeed, the crypt of the Renaissance church, it was not part of the previous building at all, as mentioned above. From the plan (Fig. 45) it is possible to see that this area lay to the rear of the medieval church; it was possibly occupied by a porticus, although there is no evidence for that.[353] As a consequence, it is clear that the fill of this part happened differently, possibly in a similar way to the exterior. The number of total fragments from this area is the lowest of the collection (3,465 fragments), and from a chronological point of view, it is not possible to notice any kind of difference from the kind of classes seen in the other two areas, so this deposit can be dated to the fourteenth century as well. Here, the proportions of the pottery types are different again, and the main classes are Archaic Majolica (1,236 frags., 35.3%), medieval Common Ware (1,394 frags., 39.9%), and Glazed Cooking Ware (334 frags., 9.5%). The other classes, even if present, are fewer, and often number less than one hundred fragments. In fact, the main classes basically represent more than the 80% of the entire group, but this is the only area in which there are few fragments of Latium Ware (41 frags., 1.2%). Again, the presence of ancient residual ceramics is extremely scarce, 1% (32 frags.). As for the main vessel forms for this area, the variety of forms resemble that seen for both the interior and the exterior areas, even if some classes are more numerous than others. As explained in Chapter 2, forms start to be much more varied from Archaic Majolica onwards, showing at least five different forms (basin, mug, bowl, soup dish, small pot). Thus, it is clearly possible to see some differences between this area and the ones previously analysed, but there are parallels too. Below I discuss these three areas together, in order to work on the reconstruction of the various phases of the church as a whole.

In general, for all the groups analysed above, the earliest class is Forum Ware, dated between the late eighth and the mid-eleventh century, while the latest one is

[353] See M. Ceci, 'S. Salvatore in Portico'.

Renaissance Majolica, dated to the fifteenth century. Considering the whole assemblage - interior, exterior and crypt - the most numerous classes are medieval common ware (6,204 fragments), Archaic Majolica (2,399 fragments), and Cooking Ware (1,274 fragments). As for the medieval Common Ware, the main forms are amphorae and lids, with types typical of thirteenth and fourteenth century, i.e. Cb5 n. 170 and n. 197.[354] In particular, each form returned at least four different types, and this is not surprising, as this class is the most numerous of the whole site. Moreover, we must bear in mind that such forms usually break into a larger number of sherds, and this affects the quantification methods (Chapter 3). However, this notable presence of medieval amphorae, which were mostly used for preserving food and/or water, suggests the use of tableware that was more expensive than common wares, and this fits the context of a church, with a more expensive assemblage here, which likely included other materials such as glass and metal or indeed fine pottery – and, in fact, one of the other main classes is Archaic majolica. As for the Cooking Ware, the site returned many different forms for this class as well, such as *testi*, cooking pots, lids, and lamps, and again each form is represented by many different types.[355] Clearly then the variety of types reflects the quantity of sherds, and the major range of the class itself. The main forms of Archaic Majolica are bowls, mugs and dishes, all characterised by numerous types.[356] In addition, bowls and mugs are characterised by a wide variety of decorations (i.e. flowers, animals, geometrical patterns), with the use of both green (*ramina*), blue (*cobalto*), and black (used for the line work), thus confirming that most of the Archaic Majolica of this assemblage is dated to the second half of the fourteenth century.[357] Finally, as for the Glazed Cooking Ware, in Chapter 2 we have considered this class as dating

[354] The types have been recognised in *Crypta Balbi 5*, nn. 168, 169, 170, 180 (amphorae), nn. 189, 192, 197, and n. 200 (lids).
[355] The types have been recognised in *Crypta Balbi 5*, n. 17 (*testo*), nn. 35, 36, 40, 41, 44, 45 (cooking pots), n. 80 (lid), nn. 104, 105, and n.108 (lamp).
[356] The types have been recognised in *Crypta Balbi 5*, nn. 471, 474, 475, 476, 477, 484 (mugs), nn. 507, 508, 510, 512, 513, 515 (bowls), nn. 522, 525, 526, 529, and 534 (soup dishes).
[357] For the Archaic Majolica and its decoration, see Section2.3.

between the medieval and the early modern productions. In particular, this assemblage returned the main forms typical of the first production of this class, which makes sense given the chronology of the other classes. Here there are pans, saucepans and cooking pots, but with fewer types.[358] However, this class evolved from unglazed cooking ware, and it is one of the consequences of the changes of food habits typical of the late Middle Ages –this is most likely the most visible consequence of that. It is important to observe the variety of forms here: the cooking pot is no longer the main form, and other forms occur to be common in the cooking assemblage, such as pans.

In summary, most of the main types of this church assemblage are dated between the first half and the second half of the fourteenth century, a period during which, as will be analysed more in detail in the final chapter, the vitality of the artisan economy is well represented by the variety of both the classes and the forms. As for the medieval residual ceramics, the types of Forum Ware (657 fragments) and Sparse Glazed Ware (518 fragments) are dated to between the end of the eleventh century and the first half of the twelfth, while classes and types typical of the period between c.1180 and c.1250/70 are almost absent.

Seen more broadly, the analysis of this ceramic assemblage helps to understand the site history – especially considering the scarcity of documentation. Thus, we have seen that there are three groups - interior, exterior and the "post 1985 area" - but only one group was a deposit inside the church. From a chronological point of view, all these groups are characterised by the major presence of Archaic Majolica, mainly dated to the second half of the fourteenth century, and by the almost total absence of Latium Ware, typical of the thirteenth century. As for the residual ceramics, both

[358] The types have been recognised in *Crypta Balbi 5*, n. 118 (pan), n. 137 (saucepan), and nn. 148, 150, and 155 (cooking pot).

ancient and medieval, the only group that returned slightly higher percentages of them is the exterior (Areas 1 to 4). Another important difference between interior area and both exterior and crypt is the absence of burials.[359] In fact, the crypt contains burials, which most likely are contemporary to the Renaissance church. As for the exterior, the scarce archaeological documentation has revealed the presence of some (most likely two) burials in both Areas 1 and 2. Unfortunately the state of the documentation does not let us date them, but there is no evidence that these burials are modern, as the ones underneath the crypt are. If so, they could be related to some phases of abandonment of the church: it is well known that the reuse of abandoned buildings for burials was a common practice in medieval Rome.[360] Finally, while the interior and the crypt show a similar density of sherds, the exterior returned an impressively large amount of ceramics. This different density is clearly related to the different development of these areas, and to the different phases of its abandonment and reuse. In particular, phases of abandonment and reuse are confirmed as well by the slight difference of chronology between the areas just analysed. In fact, the slightly higher percentage of medieval residual ceramics might indicate an early and temporary abandonment of the church, dated to eighth/ninth century, before the definitive abandonment after the thirteenth century.

6.5 – Different Site Phases Explained through Ceramics

In general, the assemblage at S. Omobono is characterised by the typical features of the medieval ceramics of Rome, and comparable to the *Crypta Balbi* assemblage. First of all, the small variety of forms and types typical of the period between the ninth to the twelfth century is succeeded by increasing numbers of types, and by the start of the fourteenth century we have a great variety of classes and forms, which might be

[359] See notes 338 and 341.

[360] See R. Meneghini, R. Santangeli Valenzani, 'Sepolture intramuranee e paesaggio urbano a Roma tra V e VII secolo', in P. Delogu, L. Paroli (eds.), *La Storia economica di Roma nell'alto Medioevo alla luce dei recenti scavi archeologici. Atti del Seminario - Roma 1992*, (Florence, 1993), pp. 89-111.

related to different food habits, as well as to a different type of urban economy. Thus, even if *Crypta Balbi* is a very different kind of site to S. Omobono, it is important to compare the quantities of the classes in this period. In fact, the prevalence of common classes, such as cooking ware and medieval Common Ware, is something which is also true for the *Crypta Balbi*: for example, from the *esedra* (exedra) of the *Crypta Balbi*[361] the main classes are medieval Common Ware (16,245 fragments), and Cooking Ware (9,276 fragments).[362] As stated elsewhere, this is not surprising, given that coarse wares have always been more common than fine wares. Moreover, we must bear in mind what was said about the medieval Common Ware: the large number of certain classes is also related to the fact that some forms (i.e. amphorae) are characterised by huge dimensions of the body, thus they are more breakable and hence there are more sherds from such kind of wares. We will come back to this point in the next chapter. By contrast, the church has a much higher percentage of fine-wares, which might be related to where these ceramics could originally come from. At this stage, it is not possible to resolve this, and further research is needed. Nevertheless, as we will see in the next section, the analysis of the characteristics of the collection has improved our knowledge of the use of the church itself.

The ceramic assemblage from S. Omobono is coherent in terms of the main forms and typologies circulating in Rome: while Forum Ware was produced between the late eighth and the first half of the eleventh century, from the second half of the eleventh century to the end of the twelfth, Sparse Glazed Ware replaced it. During

[361] Here, I am considering only the area of the *esedra*, given that is the one closer to S. Omobono in terms of chronology. In fact, the area of the garden is dated from the half of the sixteenth century onwards. See *Crypta Balbi* 3.

[362] The total of the fragments from this area is 43,950 fragments: Residual Pottery (1,139 fragments), Cooking Ware (9,276 fragments), Glazed Cooking Ware (1,568 fragments), Medieval Common Ware (1,6245 fragments), Red Painted Ware (159 fragments), Sparse Glazed Ware (9,072 fragments), imported wares (264 fragments), Green Glazed Ware (561 fragments), Latium Ware (2,258 fragments), Archaic Majolica (3,192 fragments), and Reinassance Majolica (5 fragments).

the thirteenth century, we witness the diffusion, of both the imported wares and tin-covered wares produced within the city, such as Latium Ware and Green Glazed Ware. Finally, from the end of the thirteenth century those classes totally disappeared, as they were replaced by Archaic Majolica, which we refer to as in-phase class. In general, the evolution of both classes and forms is consistent, and the same can be said regarding the collections of the church of S. Omobono.

Thus, based on what we know so far, this assemblage is not related to unexpected changes of ceramics, and it is clear that its importance lies in the relationship of this site with its surroundings. Their importance is also evident in the way the ceramics offer information about the use of this church. Key is the indication from the absence of all the classes typical of the twelfth and thirteenth centuries, that the church was still in use during that period. In fact, as explained by Ceci in the volume on the Imperial Fora, the absence of some classes should not be interpreted as the absence of life: by contrast, it indicates negative activities, such as removal.[363] For example, it is easy to imagine that during the use of the church there were no ceramics thrown away within the church itself, thus the classes in-phase with that use are less represented. Starting from those simple assumptions, we will try to reanalyse the phases of use of this church depending on the ceramic data.

First of all, from the archaeological evidence still *in situ* the different floor levels testify that the church was still used, at least, until the twelfth century, when the Cosmatesque floor was laid. Moreover, the presence of the stairs on the exterior shows that the entrance was most likely already moved to the *Vicus Iugarius* side by the same period. It is therefore clear that, if we consider the absence of the classes typical of this chronological framework to be the negative activities just mentioned, then the uninterrupted use of the church until the thirteenth century is confirmed:

[363] See Ceci, *Fori Imperiali*.

later, when they decided to re-build it, most likely the church was already abandoned, and empty. In fact, it is not difficult to agree that, after some years of abandonment, in 1482 Stefano Satri decided to rebuild the church, in the Renaissance style which survives. As regards the fill itself, from the ceramics analysis, it seems that the Areas 1-4, the outside, started to be filled slightly earlier than the inside. In fact, both the higher percentages of Forum Ware and Sparse Glazed Ware, and the high density of ceramics, demonstrate this. Moreover, the presence of some evidence of collapse in Areas 5-10, the interior, must be related to the rebuilding of the church in the late fifteenth century. Unfortunately, it is still not clear if the recorded rubble was intentional or not.[364] As stated above, what is important about this collection are the possible connections with the surroundings, and in this sense the higher number of fine wares, as well as the scarce presence of common forms typical of tableware, as most of the Common Ware sherds were from amphorae, might suggest that these ceramics derive from a wealthy context, such as a church or a monastery.

Next, at a moment between the end of the thirteenth and the end of the fourteenth century the church lay out of use. In particular, the choice of Stefano Satri to rebuild it has to be related to his intention to renovate an otherwise empty area, and this explains the coherent deposit analysed here, characterised by the good state of conservation of the Archaic Majolica – see Chapter 7. Moreover, small quantities of pottery come from the crypt, used for Renaissance burials: it is clear that the deposit of the crypt had to be different from what they used for filling the other areas. In fact, although the characteristics of the ceramics from this area are homogenous with the rest, the difference between in-phase and residual ceramics is significant, with the fourteenth-century classes being more than 80%. As a consequence, the distribution of ceramics indicates that the church was filled proceeding from the

[364] It might be that Stefano Satri decided to demolish the ruins of the medieval church in order to build the new one in 1482, but further study is needed.

entrance (Areas 1 to 4) to the crypt, with the older classes concentrated nearer the former.

In conclusion, the ceramic assemblage of S. Omobono fits with the more general Roman production between the tenth and (especially) the fourteenth century. The analysis of particular features is certainly meaningful for the history of the site, especially as we lack stratigraphic information. Further analysis of the written sources for the church is necessary; here we see ceramics as crucial to complete and improve our knowledge, which was otherwise compromised by the absence of most of the original documentation from the excavation. Finally, as seen in Chapter 7, this assemblage is a very useful sample for quantitative analysis: we will reflect on how the different methods of collecting ceramics during excavations can very much influence the final results.

Chapter 7
Quantitative Analysis of the Ceramics

7.1 – Introduction

The various pottery assemblages that we have considered in previous chapters contribute notably to the overall knowledge of pottery productions in Rome between the ninth and fifteenth century. We have certainly seen that each assemblage has different features and chronologies, and we need coherent criteria to make them easily comparable, meaningful and usable within the broader context of sites. Thus, it is essential to find the most accurate method to translate actual objects into adaptable data, which can be used not only by ceramics experts, but also by as many researchers as possible. Below, using the methods described in Chapter 3, I outline the main characteristics of each site's assemblage (Sections 7.2.1, 7.2.2, 7.2.3); then, such features will be compared for a broader economic analysis (Section 7.3).

7.2 - The Medieval Ceramics of Rome: Three Assemblages for the Wider Economic History

The sites analysed for this thesis generated a total of 40,523 sherds, generally dated between the tenth and the fourteenth century (Tab. 4). This range allows us to analyse the many changes that affected the ceramics circulating in Rome during that period. Here, the focus will be on some general results from using different quantification methods. Firstly, all assemblages contained different quantities of residual ceramics, mainly dated to the classical period and calculated depending on the number of sherds. While in general this is not surprising for Rome, it has been meaningful to compare the residual percentages of each assemblage.

Class	*Vicus ad Carinas*	Colosseum	S. Omobono
Amphorae	10,713	1,978	713
Common Ware	1,159	1,546	-
Cooking Ware	1,487	1,161	-
Painted Common Ware	92	124	-
Thin Ware	2	-	-
Black Ware	9	-	-
African Cooking Ware	102	37	-
Italic Sigillata	26	17	-
African Sigillata	515	44	-
Lamps	55	-	-
Forum Ware	**404**	567	726
Sparse Glazed Ware	**72**	**2,267**	552
Archaic Majolica	3	**-**	**2,824**
Medieval Common Ware	**11**	**1,216**	**7,236**
Medieval Cooking Ware	-	**1,753**	**1,495**
Latium Ware	-	**13**	**98**
Green Glazed Ware	1	2	108
Imported Ware	-	4	-
"Bande Rosse"	-	1	-
Glazed Cooking Ware	-	4	871
Renaissance Majolica	1	10	414
Renaissance Glazed Ware			9
N.I.	17	45	19

Table 4: Totals of ceramics from the *Vicus ad Carinas*, Colosseum and church of S. Omobono.

The archaeological layers excavated at each site resulted from different kinds of activities, e.g. sizeable fills or small layers for repairing roads. This means that the quantities of ceramics needed for those activities were clearly varied and, at the same time, the presence of diverse quantities of residual ceramics during the centuries can be related to their changing availability over time. Here, the diachronic analysis of the sites permits the comparison of the percentages of residual ceramics in order to generally infer about the reuse of residual ceramics between the tenth and fourteenth century, both ancient and medieval.

Another issue is the ratio between fine and coarse wares, which was analysed using the EVE. In fact, while it is obvious that the production of fine wares changed through the centuries, it is almost impossible to track in the same way the changes in the coarse wares, since these sherds cannot be easily dated. Nevertheless, as the case studies cover a wide chronology, we can compare the ratio between the fine and coarse wares, looking for general trends relevant for the overall knowledge of the medieval ceramics of Rome. Finally, each class is characterised by different forms, which have been recognised and quantified using the EVE in order to also analyse their brokenness. In particular, working on several assemblages is valuable, as it clarifies evolution of form over time, consequently reflecting changes in medieval daily habits.

7.2.1 - Vicus ad Carinas

Class	Count	Weight	EVE
Amphorae	10,713	25,2437	
Common Ware	1,159	15,440	
Cooking Ware	1,487	16,276	1.26
Ancient fine Wares	801	5,947	
Forum Ware	404	1,320	2.47
Sparse Glazed Ware	72	200	
Archaic Majolica	3	13	
Medieval Common Ware	11	174	0.13
Green Glazed Ware	1	3	
N.I.	17	1,028	
Renaissance Majolica	1	1	

Table 5: The amounts of ceramics from the *Vicus ad Carinas*, considering sherd count, weight and EVE (for in-phase ceramics).

Chronologically, the first assemblage is that at the *Vicus ad Carinas*, dated between the tenth and the first half of the eleventh century. Here, the residual material is

more than 90% of the total (14,669 sherds, Fig. 47), and includes mainly the ancient classes, most common being the amphorae (73%, Fig. 4, Tab. 5).

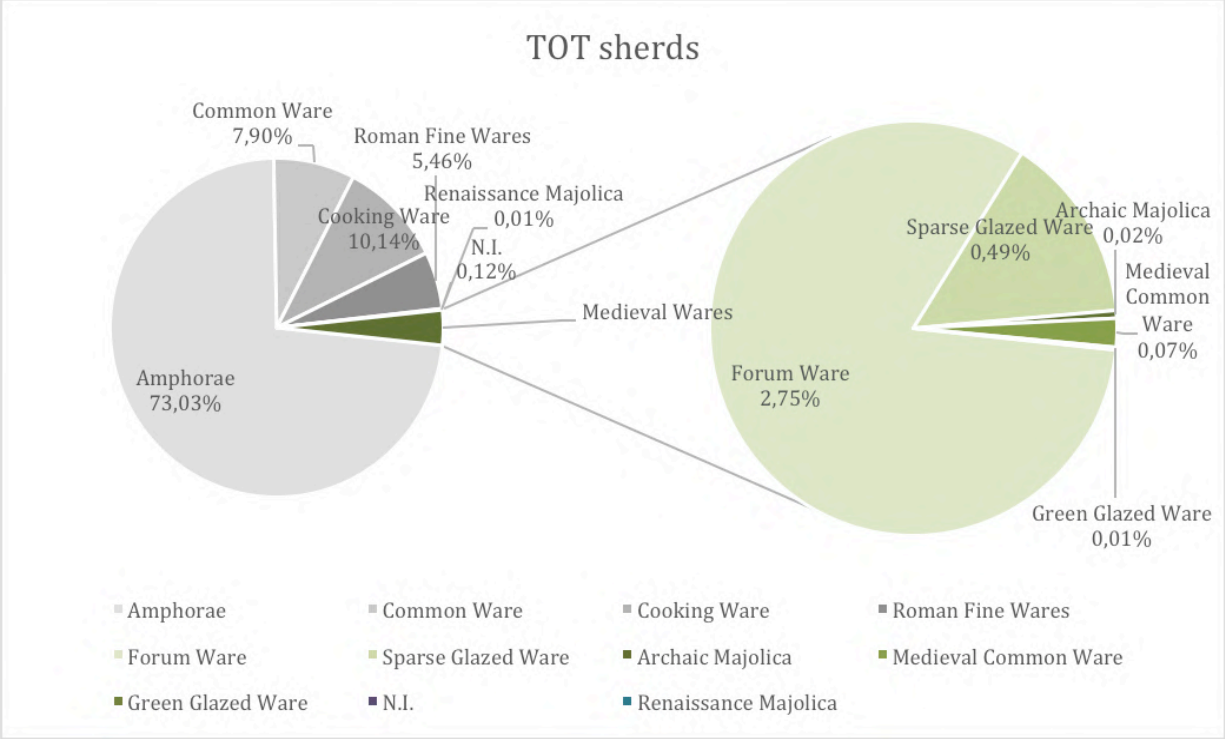

Figure 47: Ceramics from the *Vicus ad Carinas*, based on sherd count.

However, if we consider the weight of the same assemblage, the amphorae reach 86% of the total (Fig. 48, Tab. 5), and most other classes do not even reach 0.02%. Consequently, this assemblage is characterised by a high percentage of residual ancient amphorae, with the weights not reliable as regards the comparison of different classes.

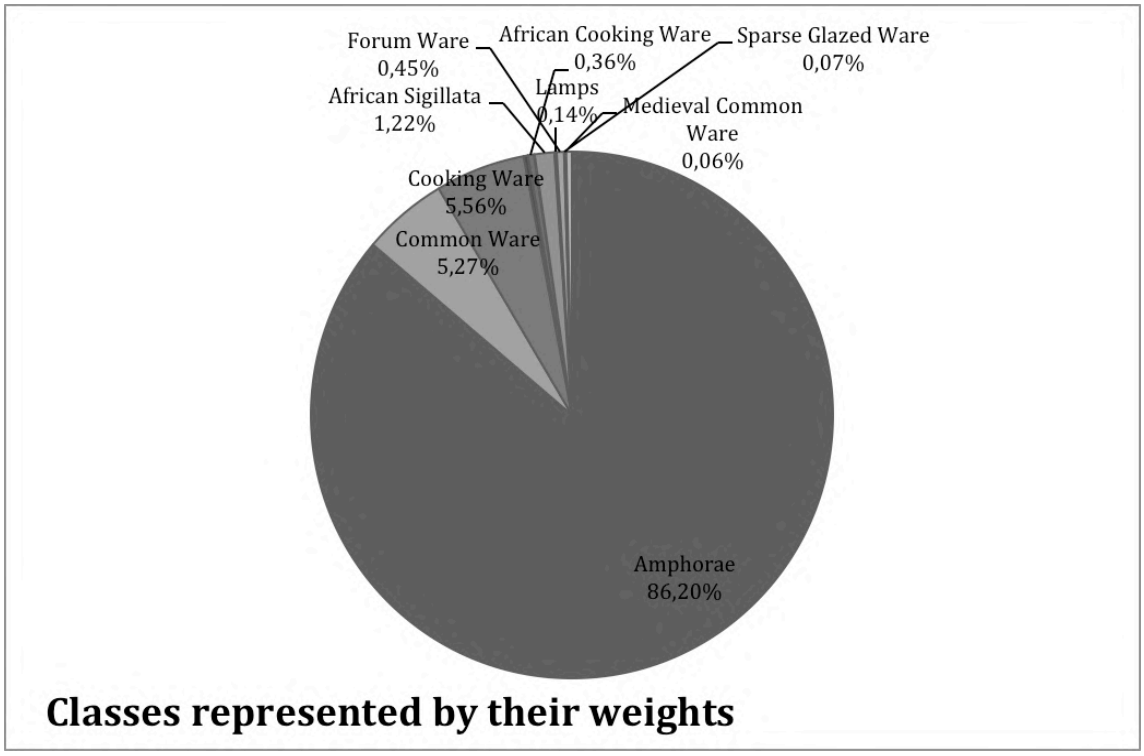

Figure 48: Ceramics from *Vicus ad Carinas*, based on weight.

By contrast, weights maintain the proportion between the various classes of different assemblages: for example, if we compare the total numbers between the classes for each year of excavation, the peaks for the weights are not as high as for the sherd count, which is affected by post-depositional processes, compromising the actual extent of data (Figs. 49 and 50). In general, it is not common to compare data from each year of excavation, but here the aim is to show the differences caused by weight and sherd count within the same assemblage: both the graphs show that the in-phase classes are generally more balanced than the residual ones. This is not surprising, considering that the residual ones went through longer post-depositional processes than the in-phase ones, despite both not being primary contexts.

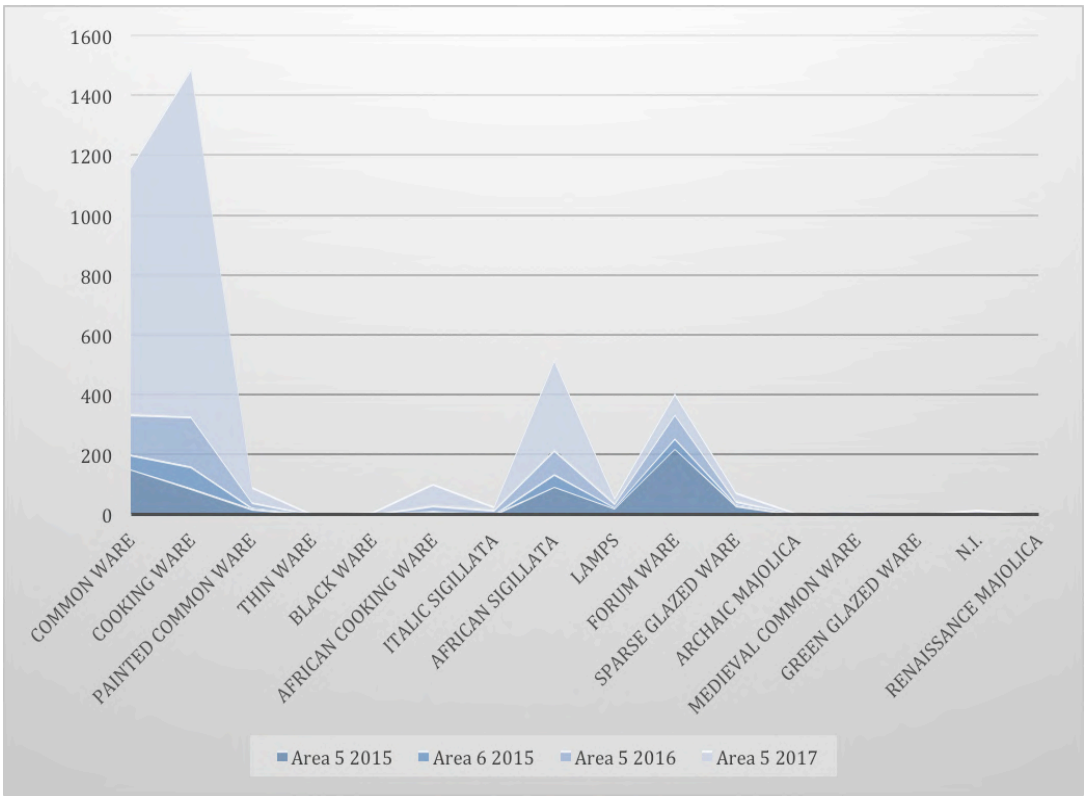

Figure 49: Ratio between the classes for each year of excavation, depending on sherd count

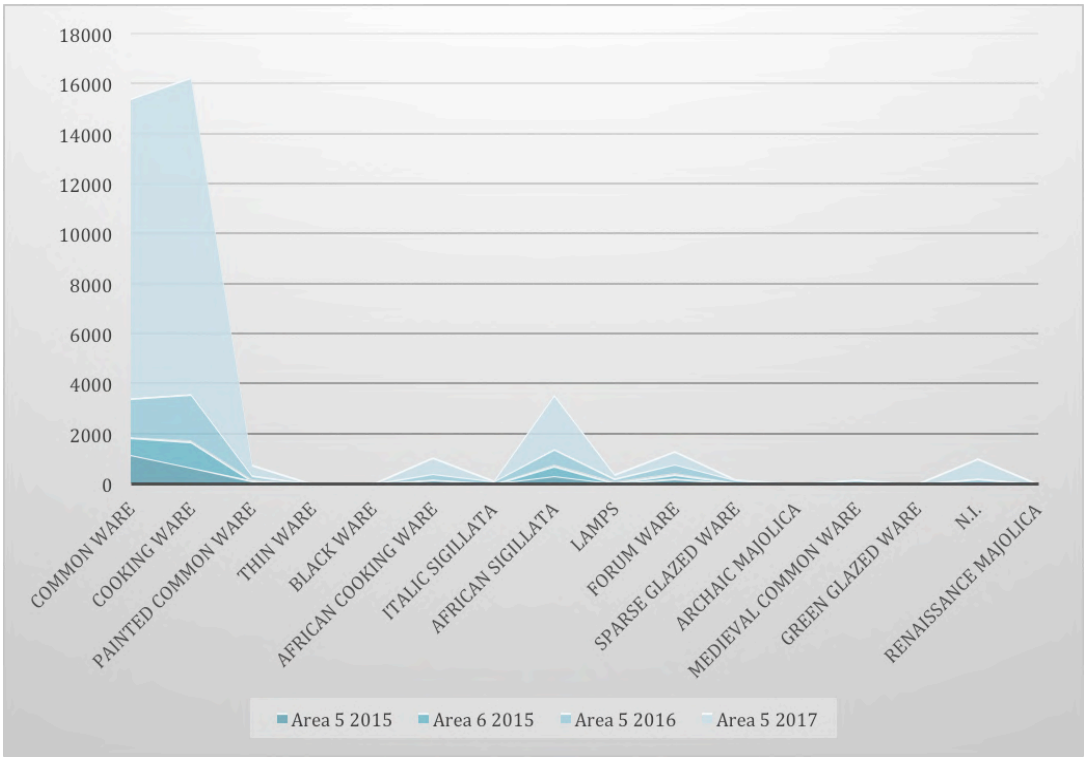

Figure 50: Ratio between the classes for each year of excavation, depending weight

When considering the EVE,[365] firstly, it must be said that this is calculated only for the in-phase classes, as the numerous post-depositional processes involving classical ceramics have totally disturbed the potential information derivable from them. Table 6 shows the EVE values to be very low, likely related to the possibility of calculating the EVE only for the measurable parts, mainly the rims. In fact, for over more than 14,000 sherds, it has been possible to find and analyse only 41 measurable parts, mostly rims. The most common classes are Cooking Ware (21 rims) and glazed wares (14 rims, including both late Forum Ware and Sparse Glazed Ware), while the Common Ware (5 rims) and the Archaic Majolica (1 rim, here intrusive) had fewer measurable rims. Considering the limited value of the sherd count, the results from EVE are not surprising. In addition, we must consider the kind of archaeological site: the ceramics were found in the archaeological layers of a road, thus were generally characterised by small size. Furthermore, while this sample is limited, scarcity is one possible feature of an assemblage, so this must be taken into account, especially as it gives information regarding chance of having measurable parts, which is statistically quite low. But EVE cannot be used as the sole quantification method, since too little data is represented. By contrast, its strength is the possibility of creating a better sense of the vessels that were originally part of the assemblage, even though the numbers here are small.

As for the level of fragmentation, calculating the so-called level of brokenness (number of sherds/EVE), is essential for defining the post-depositional processes. For the *Vicus ad Carinas* assemblage the results of such calculation are remarkably high: the Cooking Ware exceeds the value of 1,000, while the glazed wares, both the Forum Ware and the Sparse Glazed Ware, reaches the value of 300. These results were obtained by dividing the total number of each class for their EVEs. This means

[365] For EVE, see Chapter 3.

that Cooking Ware can be more than three times more fragmented than glazed wares.

This is interesting, as it might point to longer use or more fragility of the Cooking Wares. However, for the Cooking Ware it must be said that the total sherd number includes both the residual and in-phase ceramics, thus affecting the calculation of brokenness and making the results more inaccurate.[366] In order to be unaffected by the presence of residual ceramics, we can calculate the level of brokenness only for the in-phase ceramics, as this group is the most well-defined of the entire assemblage. In fact, we should also consider that the measurable parts for which it was possible to calculate the EVE are the same diagnostic parts that let us date the archaeological layers. So, if we calculate the brokenness depending only on the in-phase ceramics, the result is quite different than before, because we exclude many un-reliable sherds, which increase bias. As a consequence, the level of brokenness of the in-phase sherds, counted as a whole, is just under 170.[367] This result is much lower than the previous results, but does not differ too greatly from the results of the other assemblages analysed here. Moreover, this result is also more precise, as it considers only the chronologically-defined group from which the measurable parts come. As this thesis is the first attempt of comparing Roman medieval productions by these methods, it is not possible to define "normal" values of brokenness. However, we will see that similarities and differences between our samples might be the starting point for future research.[368]

[366] In fact, unless we have recognisable parts, such as rims and handles, walls of cooking pots might not differ from one another. Obviously, here I exclude chemical analyses, as on this occasion they could not be carried out.

[367] In order to obtain the result, I divided the total number of in-phase ceramics for its total EVE: 503/2.97=169.39.

[368] For the complete EVE analysis, see Section 3.1.

As for the ratio between the coarse wares and the fine wares, again the huge quantity of residual ceramics can strongly affect the results, and, consequently, it would be crucial to work on the in-phase classes, particularly on the measurable parts just analysed using the EVE. Unfortunately, diagnostic parts of Common Ware are very scarce here (only a single base of an unidentified vessel, most likely a closed vessel, such as a jug or an amphora). Furthermore, as for the Cooking Ware, often it is impossible to distinguish between residual and in-phase sherds. As there are fewer rims/bases, it does not mean that the class itself is not part of this assemblage at all. Indeed, we have seen that the Common Ware reaches almost the 8% of the total by sherd count, and some of the common-ware sherds have been recognised as medieval for their decorative or fabric features. For the study of this class, we must discount the EVE. All the same, if we consider that coarse wares are generally characterised by longer usages, which means that some vessels that now we consider residual were actually contemporary to our in-phase vessels, as demonstrated by the assemblage from *Vicus ad Carinas*, most likely, coarse wares and fine wares were equally common between the tenth and the eleventh century.[369]

Finally, when considering the variety of forms from *Vicus ad Carinas*, it is crucial to recognise the very high level of fragmentation of this assemblage, with most of the sherds so small that it is difficult to allocate them to specific forms. Nevertheless, the diagnostic parts are surely recognisable and thus reliable for the analysis of the main forms. As mentioned earlier, the tenth and eleventh century production is characterised by fewer functional forms. The sample from *Vicus* simply confirms that most of the glazed wares are jugs, and there are only few lids; as for the coarse wares, we have seen that the Cooking Ware contained all except one of the rims analysed and recognisable, and include mainly lids and cooking pots, while other

[369] As explained in Chapter 2, fine wares are generally characterised by more limited use, as they are not exclusively utilitarian forms.

forms such as the *testo* (bread cooker) and the *tegame* (saucepan) are quite unusual.[370] On the other hand, while the body-sherds of the Cooking Wares can be only related with difficulty to their original forms, this is not necessarily true for the other classes. In fact, some of the wall-sherds of Common Ware can be identified, such as a sherd decorated with red lines (layer n. 5098) that resembles similar findings from the *Crypta Balbi*,[371] and some walls (layers n. 5115 and n. 5117) decorated with combed parallel lines - a decoration common to medieval productions.[372] Both of those kinds of decoration are generally typical of closed forms, such as small jugs and amphorae.

In addition, it was possible to recognise some body-sherds and some handles of glazed wares too. For example, most of the Forum Ware body-sherds in this assemblage are decorated with petals,[373] and can be recognised as jugs. As for the handles, most were originally from jugs, as it is possible to recognise from their dimensions. Yet, there is at least one example of a smaller handle (layer n. 5182), which most likely was part of a lid, such as the ones found in the layer n. 5104. There was also one spout covered with holes, typical of the early production of Forum Ware, generally dated between the ninth and tenth century.[374] Thus, it is clear that the forms of the typical tenth-to eleventh-century ceramic set were few, and mostly closed vessels, such as cooking pots and jugs, which can be considered the main forms of this period. As will be analysed in detail later, this small variety of forms is significantly different from both the ancient period and the late medieval period, from the late twelfth century onwards.

Finally, it is crucial to bear in mind that coarse wares especially were characterised by long use, and, as explained elsewhere, their forms were mainly utilitarian,

[370] The broader analysis of the forms is in Chapter 2.
[371] See *Crypta Balbi 5*.
[372] Ibid.
[373] On the Forum Ware see Section 2.2.
[374] Ibid.

meaning there was no need to change them often if they were still. By contrast, it is likely that such forms were used until they broke. Unfortunately, excavations of sites dated between the eighth and the tenth century in Rome are relatively scarce, making it difficult to prove. At the same time, the connection between Forum Ware, cooking pots and the presumably ancient lids is well documented in most of the excavations that returned Forum Ware, making the hypothesis of longer use of ancient types of lids more convincing.

In conclusion, the analysis of the assemblage found in the *Vicus ad Carinas*, dated to the late tenth to the eleventh century, reveals some useful points. The significant level of fragmentation is unsurprising, given the nature of the site, but this affects all aspects of the assemblage and confirms the scarcity of forms generally documented in Rome in this period, as well as the uninterrupted use of certain utilitarian forms. The continuity with the previous centuries is evident and the innovation represented by the Sparse Glazed Ware is outlined here. Moreover, the steady presence of the glazed wares demonstrates that they were of common use.[375] Finally, as regards the quantification methods, this assemblage has demonstrated the limits of all of these, including the EVE, which means that they acquire greater significance when used together.[376]

7.2.2 - The Colosseum

The analysed assemblage from the Colosseum was composed of two groups: those from *Cuneo IX*, and *Cuneo* X, whose chronology is from the late twelfth to the first half of the thirteenth century. In total, the Colosseum assemblage amounts to 10,789

[375] Furthermore, the use of precious vessels (or parts of them) for the layers of a road does not make sense: in general, the precious and/or reusable materials are more difficult to find in archaeological excavation – such as for the glass, metal work, and coins.

[376] In fact, if we used only the EVE, results would have been totally different, given the scarcity of diagnostic parts.

sherds, 2,000 from *Cuneo* IX (Tab. 6), and 8,789 from *Cuneo* X (Tab.7). Below, the groups are first analysed separately in order to highlight any kind of difference related to the formation of the archaeological deposits. Then, the main features of the assemblage as a whole will be considered. Finally, given that part of the ceramics from *Cuneo X* has been considered as a primary context, it is essential to analyse as well if there are consistent differences in the features analysed in this chapter, above all the EVE and the brokenness.

Class	Count	Weight	EVE
Amphorae	969	23,458	
Ancient fine wares	96	532	
Common ware	414	2,021	
Cooking ware	285	2,703	
Forum ware	42	256	
Sparse glazed ware	63	487	0.07
Medieval common ware	90	864	0.31
Medieval cooking ware	29	462	
Latium ware	8	73	
Green glazed ware	1	4	
N.I.	2	9	
Renaissance majolica	1	0,8	

Table 6: Table recording amount of ceramics from the Colosseum Cuneo *IX*, considering sherd count, weight and EVE (for in-phase ceramics).

Class	Count	Weight	EVE
Amphorae	1,009	29,016	
Ancient fine wares	126	630	
Common ware	1,132	7,878	
Forum ware	525	3,340	
Sparse glazed ware	2,204	15,078	12.21
Medieval common ware	1,126	12,275	4.1

Medieval cooking ware	1,724	13,353	12.19
Latium ware	5	20	
Imported ware	4	98	
Red painted ware	1	1	
Green glazed ware	1	1	
Glazed cooking ware	4	3	
Renaissance majolica	9	25	
N.I.	43	185	

Table 7: Table recording amount of ceramics from whole *Cuneo X*, considering sherd count, weight and EVE (for in-phase ceramics). It must be considered that in the main text the analysis of brokenness is divided into the types of layers.

Cuneo IX returned a modest quantity of ceramics, especially when compared to *Cuneo* X (Tables 6 and 7). Nevertheless, the stratigraphic analysis demonstrated numerous activities in this area from the start of the twelfth century to the end of the thirteenth.[377] Those differences are useful when we aim to analyse both the brokenness of an assemblage, and the formation of the archaeological layers. The layers of *Cuneo* IX recognised as levelling activities will be analysed separately, in order to observe any significant differences.

The layers that originated through some kind of levelling activities contained 210 sherds, 27 of which are in-phase. If we consider the measurable parts for which it was possible to calculate the EVE, there are just 3 rims (2 of medieval Common Ware, and 1 of Sparse Glazed Ware). The EVE of the common wares is 0.31, while for the Sparse Ware is 0.07. This is not a statistically reliable sample, but it would at least indicate that the estimated number of common wares is higher than for the glazed wares; if we consider their quantities as well (90 sherds of medieval Common Ware, and 63 of Sparse Glazed Ware), it is clear that Common Ware from this deposit is generally better preserved than Sparse Glazed Ware. In fact, if we consider their

[377] As for the various phases of reuse, see Section 5.4.1.

level of brokenness, the former has an index of almost 290, while the latter reaches 900, which, as seen, is very high.[378] Conversely, if we consider the same values for the whole group of in-phase ceramics from the same layers, the total EVE for the in-phase ceramics of those layers is 0.38, while the level of brokenness is very low, at 71.[379] Such results let us compare different in-phase assemblages, which might not have the same classes, and thus it would be impossible to compare them. In fact, the result of the in-phase ceramics from *Cuneo IX* is significantly different from the level of brokenness of the in-phase ceramics from the *Vicus*, which is almost 169. Moreover, if we consider the general level of brokenness of the whole *Cuneo IX*, over 2,000 sherds, 164 of them (excluding the ones just analysed) have been recognised as in-phase ceramics. There, the level of brokenness is lower still, at just over 43 (164/3.77=43.5). As a consequence, clearly there is not an important difference between the levels of brokenness of the fills and the rest of the assemblage, while it is evident that the assemblage from *Cuneo IX* is significantly less broken than the one from the *Vicus ad Carinas*. Finally, as regards the comparison between the sherd count and the weight, the difference is significant: for example, considering the amphorae, while they account for almost 50%, depending on count, they reach almost the 80% of weight. Therefore, the weight is affected by the same bias that we have analysed before and the risk of under representing some classes is evident. As a consequence, the need for comparable methods is even more evident. As will be shown, similar conclusions can be made for *Cuneo* X.

Despite *Cuneo* X being next to *Cuneo* IX, the archaeological evidence significantly differs, especially in terms of quantities. Furthermore, fewer activities have been recognised and most are fills. At the same time, we must bear in mind that the

[378] In order to calculate the brokenness for each class, I have divided the total number of sherds of each class by their EVE: 90/0.31= 290.3 for the medieval Common Ware; 63/0.07=900 for the Sparse Glazed Ware.

[379] This value has been calculated by dividing the total number of in-phase sherds from the levelling layers by its EVE: 27/0.38=71.05.

assemblage analysed here does not include the whole *Cuneo* X, as some of the archaeological layers are part of an analysis made by Eva Castellucci. Thus, here the results of her study will be used in order compare the EVE and the brokenness of the sherds: the contexts being different, it is worth looking for analogies and differences. As regards the sherd count and the weight, from the graphs (Figs. 51 and 52, and Tabs. 7 and 8) we can clearly see the bias caused by the presence of heavier classes.

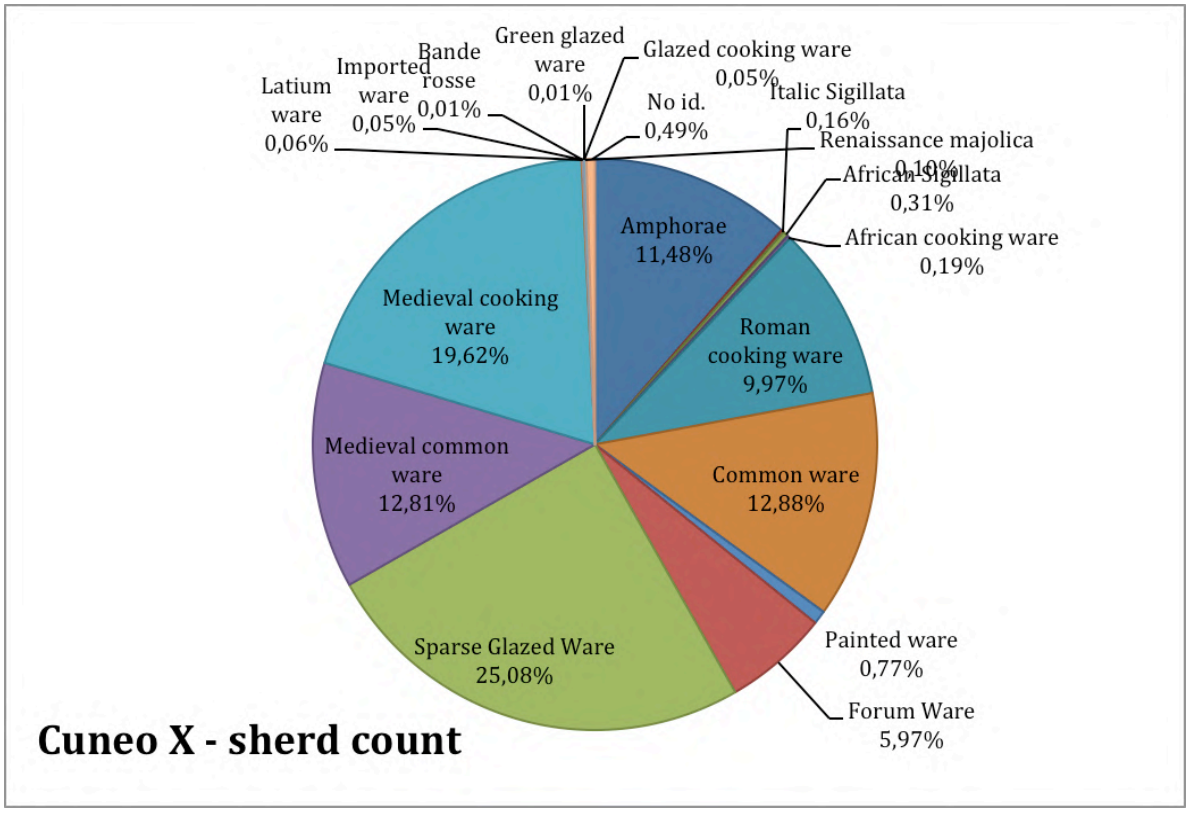

Figure 51: Ceramics from *Cuneo X*, based on sherd count.

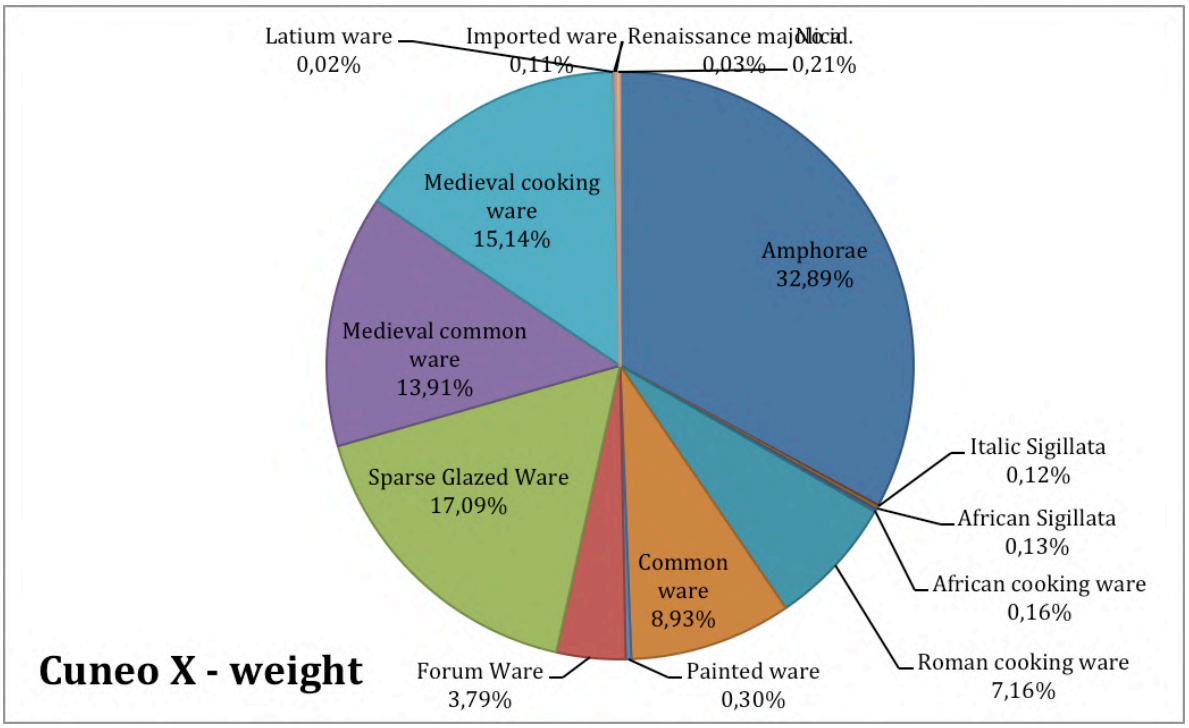

Figure 52: Ceramics from *Cuneo X*, based on weight.

In fact, while from the sherds count the amphorae form almost 12% of the whole assemblage, the same class reaches 33% when we consider the weight. By contrast, often some classes in-phase are not very significant when we only consider the weight: for example, the Sparse Glazed Ware, 25% in the sherd count, represents only 17% of the assemblage by weight. This issue can strongly influence the interpretation of an assemblage, as proportions between classes can be misinterpreted.

As for the EVE of this assemblage, while some deposits of this *cuneo* were created as large levelling layers, some others originated from the progressive increase of the level of soil. On the former, the measurable parts, mainly rims, are 378, a statistically significant sample. This can be set against the total number of in-phase ceramics (2,889 frr.), of which there are, Sparse Glazed Ware (1,161 frr.), medieval Common Ware (510 frr.) and Cooking Ware (1,218 frr.). This means that 13% of the in-phase ceramics comprises measurable parts, for which EVE has been calculated. When considering the EVE and the brokenness for such group, the results are surprisingly

different from *Cuneo* IX. The total EVE is 16.13, while brokenness is almost 180 (2,889/16.13=179.11), meaning that, despite the large quantity of ceramics found in those layers, and the numerous estimated vessels, their fragmentation is quite high and closer to the results seen for the *Vicus ad Carinas* than for *Cuneo IX*.[380] Accordingly, we can see that the fills of this assemblage are characterised by a level of brokenness similar to that of the sherds found in the layers of a road, which most likely reach one of the highest peaks for brokenness (at least among the sites analysed here).

Considering archaeological layers created by the progressive increase of the soil level, we can see they contain 2,165 sherds, 7% of which are measurable parts, mostly rims. Their EVE for this group is 11.77 and brokenness is slightly more than the previous group, almost reaching the value of 184 (2,165/11.77=183.94). Thus, despite the different formation of the originating layers, the results for this group are, significantly, close to the group of layers originating from the large fills. This means that most likely the ceramics of *Cuneo* X went through similar post-depositional changes. By contrast, layers excavated in *Cuneo* IX are characterised by a smaller volume, fewer sherds and a lower level of brokenness. Hence, it seems unlikely that the ceramics went through similar post-depositional events, or that the two groups were originally from the same assemblage.

Finally, we must consider the group of layers identified as those formed within the use of *Cuneo* X. In particular, as explained in Chapter 4, both the phase dated to the first half of the thirteenth century and that dated to the second half of the same century are characterised by earthen pavements, which contained modest quantities of ceramics. The earlier layers featured 251 sherds, with 15 measurable parts, mostly rims. The EVE for those layers is 3.3, while the brokenness of the in-phase ceramics is

[380] For the *Vicus ad Carinas*, the brokenness is almost 170; for *Cuneo IX* it is 71.

just under 70 (229/3.3=69.4). This result is significantly lower than the results from the rest of *Cuneo X* previously analysed, but similar to the results from *Cuneo IX*. This means that this assemblage is characterised by well preserved vessels, as expected from such layers types. In fact, not being the layers related to large fills characterised by smaller sherds, we would expect more preserved vessels. Furthermore, another earthen pavement was dated to the second half of the thirteenth century, which held 67 measurable parts, mostly rims. The EVE is 30.03, thus the brokenness is 22 (673/30.03=22.41). As above, these results are very significant, because this result is the lowest analysed so far and it indicates a group of sherds characterised by very high level of preservation. It should be considered that the lower the brokenness, the higher the level of preservation of vessels. While these results come from similar archaeological layers, it is worth analysing the same index for the archaeological layers that have been identified as the ones corresponding to the actual use of the *cuneo*. There, the measurable parts are 29 and their EVE is 3.33; the brokenness is then 108 (360/3.33=108.1). Despite the result being higher than for the previous layers, it does not reach the peak of the huge fills analysed above. This indicates that the vessels are quite well preserved, and are comparable to those from the thirteenth-century layers, suggesting that all archaeological deposits that were gradually created contemporary to the use of both *cunei* are characterised by well-preserved sherds. By contrast, sherds that have been found in large and homogenous fills are typically smaller.

Thus, regarding the brokenness of the assemblage found in *Cuneo* X, some differences are evident. In large fills the ceramics are very fragmented, values quite high (180 and 185), while the ceramics related to the use of such space during the thirteenth century are better preserved, with brokenness ranging from 22 to 108. The level of brokenness of former layers recalls that analysed for *Cuneo IX*, indicating that the vessels of those two assemblages could have had similar post-depositional processes.

Next, if we consider the ratio between the residual and the in-phase ceramics, while from *Cuneo* IX almost 90% of the ceramics are residual, *Cuneo* X returned mostly in-phase classes, such as the Sparse Glazed Ware, and such in-phase ceramics hits the peak of almost 58%. As a consequence, when considering the two groups as a whole, the ratio results are very similar, as the residual ceramics (almost 51%) are slightly more than that of phase one (almost 49%). This balance between the residual and the in-phase classes is unusual and most likely related to the huge availability and spread of the ceramics then available, the production of which increased and became more standardised from the second half of the twelfth century onwards. This is confirmed by the ratio between coarse and fine wares. In fact, more than 50% (56.54%) by sherd count of the in-phase classes are coarse wares, meaning that coarse wares and fine wares are again balanced.

Considering the period during which those classes were produced, it is significant that the late twelfth century corresponds both to an improvement in the quality of ceramics, and to a high level of standardisation. Yet, it is crucial to consider the main forms produced from the second half of the twelfth century, since the in-phase classes have returned several of them. On the one hand, the most common are the jugs, which were produced both as Sparse Glazed and as Common Wares, and the cooking pots (*olla*). On the other hand, it is possible to recognise the presence of "new" forms, such as lids, medieval amphorae, basements for amphorae and mugs, which clearly mark the passage between the early medieval and late medieval productions. Then, it is significant that the assemblage from the late twelfth-century Colosseum is characterised by a variety of forms not visible in the previous centuries.

In conclusion, the ceramic assemblages found in both *Cuneo* IX and *Cuneo* X of the Colosseum share many features. First, the chronology of the classes and the types

define this as a late twelfth-century group very well. The in-phase classes found are the same for each of the *cunei*, while the ratio between the coarse wares and the fine wares significantly differ, but as explained above, this is due to completely differing originating archaeological layers. As regards the level of brokenness of these groups, while the ceramics from *Cuneo* IX are characterised by a good level of preservation, in *Cuneo X* we see a group of well-preserved sherds, those related to the archaeological deposits of use, as well as large groups of highly fragmented sherds, such as those found in the large levelling fills. As for the former, brokenness is similar to the assemblage at the *Vicus ad Carinas*. Finally, comparison between the sherds from the fills and the sherds from the layers related to the actual use of the *Cuneo* X has demonstrated that the ceramics from "living" layers are characterised by the lowest brokenness level among the cases analysed here. This kind of analysis - which is totally new for the medieval ceramics from Rome - can open notable new perspectives to ceramic studies, as it may let us identify the kinds of archaeological deposit depending on the level of preservation of sherds.

7.2.3 - The Church of S. Omobono

The last assemblage to be analysed comprises ceramics found in the large fills inside the church of S. Omobono, a site very different from the previous ones, particularly considering the state of the old archaeological reports.[381] Moreover, in this particular case, weights were not measured, because of the state of the assemblage itself, in order not introduce bias. Despite this, it is possible to view the fill of the S. Omobono church as a homogeneous set, making the ceramic assemblage intelligible enough for further statistical analysis, or, as Orton defines it, statistically homogeneous.[382]

[381] In particular, see pp. 267-268.
[382] See Orton, *Pottery in archaeology*.

Class	Interior	Exterior	Crypt	Tot EVE
Ancient Residual Ceramics	236	445	32	
Forum Ware	105	480	141	
Sparse Glazed Ware	88	427	37	
Medieval common Ware	1818	4024	1394	8.35
Cooking Ware	327	970	198	
Latium Ware	27	30	41	
Archaic Majolica	769	819	1236	49.15
Glazed Cooking Ware	268	269	334	12.71
Reinassance Majolica	190	219	5	
Green Glazed Ware	13	23	72	
Reinassance Glazed Ware		9		
Others	8	4	7	

Table 8: Table showing amounts of ceramics from each area of S. Omobono, just considering sherd count and total EVE (for in-phase ceramics); weights were not measured.

The pre-1482 church building was smaller than the one now present.[383] In fact, it has been found Areas 1 to 4 were not part of the pre-1482 building, but were part of a still not well defined outside, while the actual building covered Areas 5 to 10. Moreover, although the stratigraphic information is scarce, we must bear in mind that the number of layers for each area is different, as well as their depth. In total, the assemblage returned 15,065 sherds (Tab. 8), of which the residual ancient classes are less than 5%. This is significant if compared to the assemblages from the other two

[383] See Chapter 6.

sites, because by contrast they are both characterised by really high percentages of residual ceramics. This evident difference between S. Omobono and the other two sites analysed is related to the kinds of layers at this site, characterised by almost whole vessels and a low level of brokenness. Moreover, the chronological homogeneity of the late medieval assemblage from S. Omobono, clearly indicates that the vessels found in the fills were likely part of the same assemblage when they were still used.

The small groups of residual ceramics found in S. Omobono, as well as the various archaeological evidences *in situ*, confirm that the church was used between the tenth and twelfth/thirteenth centuries. At the same time, the presence of a higher percentage (almost 10%) of tenth- to eleventh-century ceramics in the layers that were in the external part of the medieval church indicates that this part started to be abandoned (and filled) before the interior of the church. In fact, it is likely that the strata containing both Forum Ware and Sparse Glazed Ware were created differently from the filling strata full of late medieval ceramics which must have been created on the occasion of the rebuilding of the church.

If we consider the state of preservation of the vessels, the brokenness for each class is always similar, and the contexts (internal, external and crypt) do not really differ each other. As regards the EVE and the brokenness of the assemblage as a whole (Fig. 53), if we consider the two main classes, the Archaic Majolica and the medieval Common Ware, the higher level of fragmentation of some classes compared to some others is very noticeable: for example, there are 1,072 fragments of Archaic Majolica, and 878 of medieval common ware, but while the first one has 32.47 as brokenness index, the other one's index is 113.29.

Figure 53: Sherds of Archaic Majolica from the collection of S. Omobono. These show typical colours of decorations, the green ("ramina") and the blue ("cobalto"), and the good state and size of sherds. (Source: picture by Lucrezia Campagna)

The Archaic Majolica was well-preserved, while medieval common wares, despite not being as fragmented as other assemblages analysed above, are less so. This difference is partially explained by the main forms for these classes. While the bowl is the most represented for the Archaic Majolica, the amphora is the main one for the medieval Common Ware. As a result, the great difference of brokenness is clearly explained by the dimensions of the bowls of this period, which are characterised by reduced dimensions and solid body. This is totally different from medieval amphorae, whose body was generally quite thin. We do not notice any significant difference between the various areas of this site, as often the sherds are quite well preserved, with low values of brokenness, thus demonstrating that this fill was intentional. In fact, we have to imagine that, before rebuilding, the church must have been abandoned, and the fill came when the rebuilding started. Thus, the vessels

were likely originally from the assemblage and were affected by post-depositional processes.

Finally, as regards the main forms, S. Omobono is characterised by a wide chronological variety, as the classes represented are dated from the tenth to the fourteenth century. It is thus straightforward to analyse the evolution of forms, which progressively increase from the late twelfth century onwards. In fact, while both Forum Ware and Sparse Glazed Ware returned few forms, mainly jugs and fewer lids and basins, for the central medieval productions, such as Latium Ware and Archaic Majolica, it is possible to identify a larger variety of forms. Apart from jugs and lids, there are pans, lamps, mugs, amphorae, soup dishes, but mostly bowls, which can be considered as the most common form from the late thirteenth century onwards. Such variety of forms let us analyse how the brokenness affects differently each form, and as a consequence, each class, as clearly some of them tend to be better preserved than others. The main example is the Archaic Majolica, given that the main form is the bowl, the EVE is quite high and the brokenness tends to be low, however, this is justified by the kind of form itself, not easily breakable.

In conclusion, the ceramics from the church of S. Omobono are very coherent, coming from a single fill designed to support the rebuilding of the church. In fact, the main features of each area are similar and the variety of forms has permitted us to analyse how the brokenness can be different depending on the forms themselves. At the same time, if we consider the external area, both the presence of more sherds and the higher percentage of tenth- to eleventh-century classes indicate different phases to the fill. It is most likely the external area was abandoned before the internal one. Moreover, low percentage of the residual ceramics is another important feature of this assemblage. In particular, if we consider that this area was external, these low percentages are even more striking if compared to the *Vicus ad Carinas*, our other "external" context. As a consequence, even though the S. Omobono church

overlooked the *Vicus Iugarius* (the modern Via della Consolazione), given the low brokenness values, it is unlikely that the use of the external area of the church was somehow related to the road; the "external" area did lie outside the church, but most probably it was not an open area.

7.3 - Diachronic Analysis of the Medieval Ceramics of Rome

What can be said from the above in terms of the value and problems of the ceramics studied? Below I address three aspects:

i. Residuality;
ii. Ratios;
iii. Brokenness.

7.3.1 – Residuality

First of all, we must comment on the residual ceramics, which are generally defined as finds that do not have the same chronology as the layers in which they were found, but predate those. The debate regarding how to define what is residual or not is lively, but complicated, to determine how to analyse such materials. For example, their chronological information that we can have is questionable, because unfortunately it is not possible to use the residual finds as chronological markers. At the same time, a few examples have demonstrated that we can use residual ceramics in order to complete the stratigraphic information of a site, although this can only happen when at least some parts of the original stratigraphy are preserved.[384] Nevertheless, the main issue regards the fact that we cannot distinguish when some classes started to be residual within them, and this means that it is impossible to say if one class was already residual when another class became residual as well,

[384] See F. Guidobaldi, C. Pavolini, P. Pergola, *I materiali residui nello scavo archeologico. Testi preliminari e atti della tavola rotonda (Roma, 16 marzo 1996)*, Rome 1998.

especially if we are considering coarse wares, which were typically used for longer than fine wares. Hence, the chronological value of residual ceramics is very difficult to define.

Despite that, the presence and the absence of some classes from the residual materials can indicate the moment of use of a site: one of the most successful examples of such an analysis has been done by Monica Ceci for the Imperial Fora (Fig. 53).[385] Here, after calculating the weighted average of each class, the in-phase classes were studied separately, in order to obtain the so-called "residuality area", which is represented in Fig.54 by the space between the in-phase ceramics (bottom line) and the whole assemblage (upper line), and indicates the various changes that impacted on the area of Imperial Fora, which returned different quantities of ceramics.

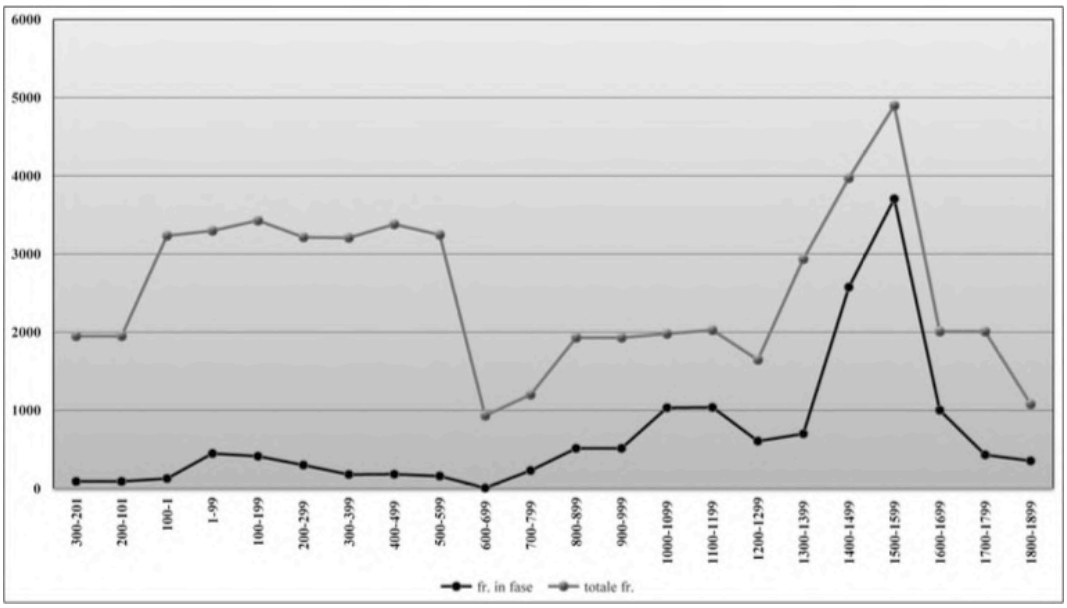

Figure 54: Graph showing the so-called "residuality area", which is the distance between the lines in the figure. The upper line is the amount of ceramics found in the Imperial Fora; the bottom line represents only the in-phase fragments from the same area. (Source: Ceci 2013, Fig. 6, p. 6)

When the two lines are close, it means that the kind of activities happening in the Fora returned a significant amount of in-phase ceramics, that became less during the

[385] See Ceci, *Fori Imperiali*, pp. 6-9.

periods of use of the area. By contrast, every time the two lines are distant, it means that either the activities that took place in the Fora were fewer, or there were "removal" activities, which produced limited in-phase ceramics evidence. This kind of close analysis of the ceramics has enabled the wider analysis of the use of the Fora over time, from the first century BC up to the end of the nineteenth century (see below). As regards the assemblages analysed in this thesis, unfortunately their high level of brokenness has compromised the possibility of using such accurate calculations, since, often, it was not possible to recognise types and chronologies, which of course are crucial for the weighted average. Despite that, some general claims can be made.

First, we have noted how common is to have really high percentages of residual materials from the excavations in Rome, and the assemblages from both the *Vicus and Carinas* and the Colosseum demonstrate that the lowest percentage is almost 50% of the assemblage (Colosseum), while the highest percentage reaches a peak of almost 90% (*Vicus ad Carinas*); by contrast, the assemblage of the church of S. Omobono returned fewer residual ceramics (c. 5%). The main features to be considered relate to the **formation** of the site analysed, and to the **availability** of broken ceramics to be used as part of fills. In fact, it is crucial to consider first which kind of site we are analysing. For example, in the case of *Vicus ad Carinas* the site was a medieval road, whereas both the assemblages from the Colosseum and from the church of S. Omobono were primarily huge fills created as the result of homogeneous activities - if we exclude the archaeological deposits contemporary to the use of *Cuneo X*. Accordingly, while we should expect more residual ceramics from the bigger fills, than from the small layers which originally formed the road, our samples have demonstrated the opposite: the site that generated most residual ceramics is indeed the *Vicus ad Carinas*; the Colosseum is characterised by a sort of balance between residual and in-phase ceramics, while S. Omobono contained the lowest quantity of residual ceramics. This means that either it can depend on the

type of site or it relates to when the archaeological layers were created. Interestingly, if we analyse the residual ceramics from each of the sites analysed, the results are significant (Fig. 55):

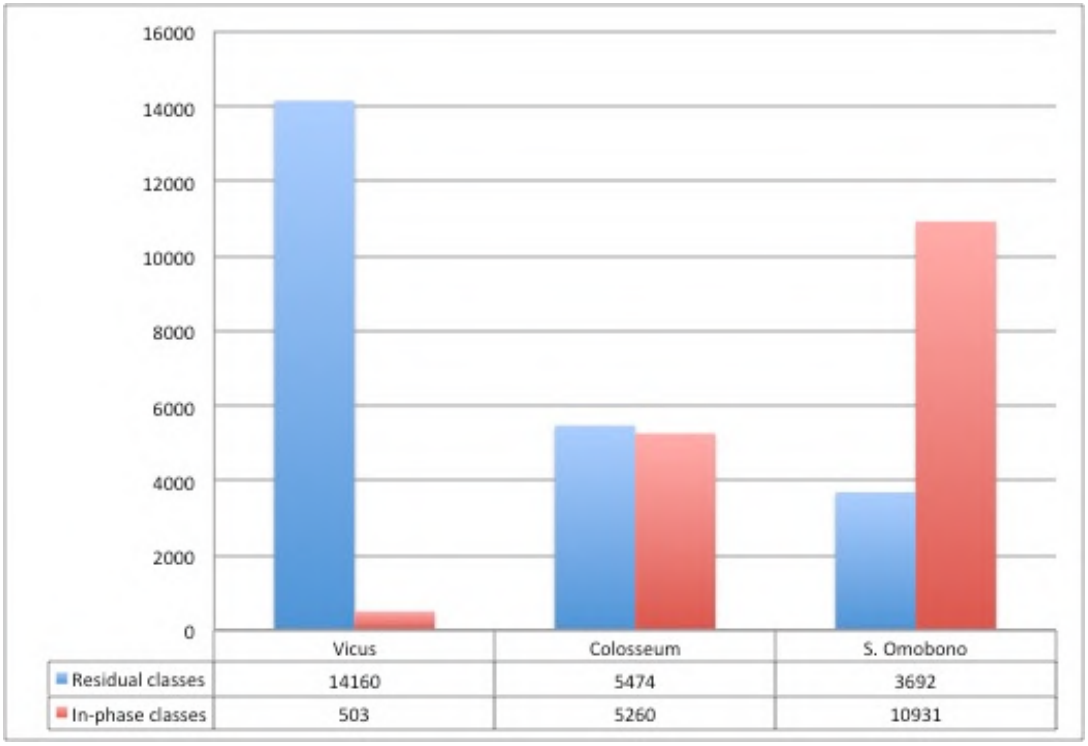

Figure 55: Comparison between residual and in-phase classes for each site analysed.

Indeed, our sample shows that the quantity of residual ceramics significantly decreases from the tenth to the fourteenth century, but as these diachronic analyses are currently quite uncommon, it is impossible to check if our results can be considered an exception or a rule. However, the classes that can be considered residual increase, so theoretically we could expect more residual materials from the fourteenth century than from the ninth century. In particular, the decrease of the residual materials does not correspond to the absence of the most ancient classes, when there are residual materials, the classes represented are almost always the same ones, plus the addition of the classes that steadily across time join them as potentially residual as well, even though the quantities might vary. This means that, probably, the different quantities of residual materials between the tenth and late

fourteenth century must be related to the availability of both the broken sherds and, most importantly, to the quantities of ceramics produced during the period of the formation of the sites, and, consequently, to the quantity of ceramic waste available. Thus, if we consider the quantity of in-phase ceramics during the same period (Fig. 55), it is clear that the Forum Ware of the tenth and eleventh century was not produced as massively as either the Sparse Glazed Ware in the late twelfth century or the tin glazed classes of the thirteenth and fourteenth century.[386] Such conclusions are firm, and they are crucial when put together for the wider analysis of medieval Rome.[387]

7.3.2 – Ratios

Next, we must consider the ratio between coarse wares and fine wares across the tenth to fourteenth century, excluding the residual ceramics. This means that we will take into the account the Cooking Wares and the Common Wares as coarse wares, whenever identifiable as medieval, while Forum Ware, Sparse Glazed Ware, Latium Ware, Green Glazed Ware, and Archaic Majolica, will be considered as the fine wares (Tab. 4). We must bear in mind that the coarse wares are affected by some bias, since sometimes it is not possible to distinguish the un-diagnostic parts either as ancient or medieval. All the same, if we consider the quantities of in-phase coarse wares and fine wares for each assemblage (Fig. 56), it is noticeable that the in-phase wares from the Colosseum are characterised by almost the same quantities of coarse wares and fine wares, the assemblage from the *Vicus ad Carinas* is characterised by few identified coarse wares, while the assemblage from S. Omobono has more coarse wares than fine wares.

[386] Nevertheless, as we will discuss in the Chapter 8, a more substantial production does not necessarily correspond to a growing economy.

[387] It would be interesting to increase our sample in order to analyse the extent of such decrease. Theoretically, we should expect a decrease in classical pottery as residual finds over time, thus in contrast to the general "rule" of the always high percentages of classical residual ceramics from the sites in Rome.

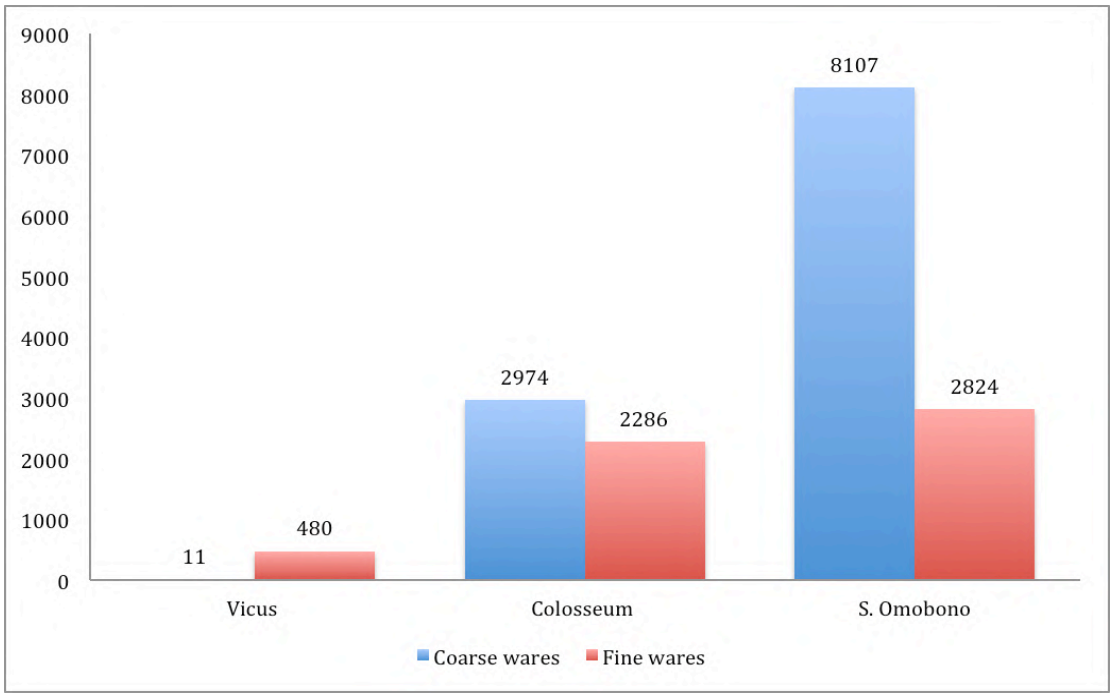

Figure 56: The quantities of in-phase coarse wares and in-phase fine wares for the three main sites in each period.

In general, having more coarse wares than fine wares is not surprising, and considering the whole period examined (Fig. 56), it is clear that both coarse wares and fine wares increased between the tenth and the fourteenth century, but while the latter are characterised by **steady** increase, the coarse wares **rapidly** increased. This can be explained as the consequence of the increased demand for daily goods, and as well as by an increase of the population.[388] Nevertheless, it is significant that the assemblage from the Colosseum, mainly dated to the late twelfth century, is characterised by a balance between fine wares and coarse wares, something that is not true for the other assemblages analysed. Such peculiarity is likely to be related to the changes in ceramic production of the second half of the twelfth century, of which the last production of Sparse Glazed Ware is a clear consequence: in this period, the production of fine wares increased substantially. At the same time, it is crucial to see that the results from the other assemblages are affected by diverse issues: for the

[388] See Conclusion.

Vicus ad Carinas the scarcity of medieval coarse wares is also caused by the impossibility of recognising the un-diagnostic parts; for S. Omobono, the huge quantity of sherds is related to the kind of forms typical of the Common Wares produced in that period. Thus, such features must be compared to other assemblages, but before doing that I will consider changes in forms in the same chronological framework.

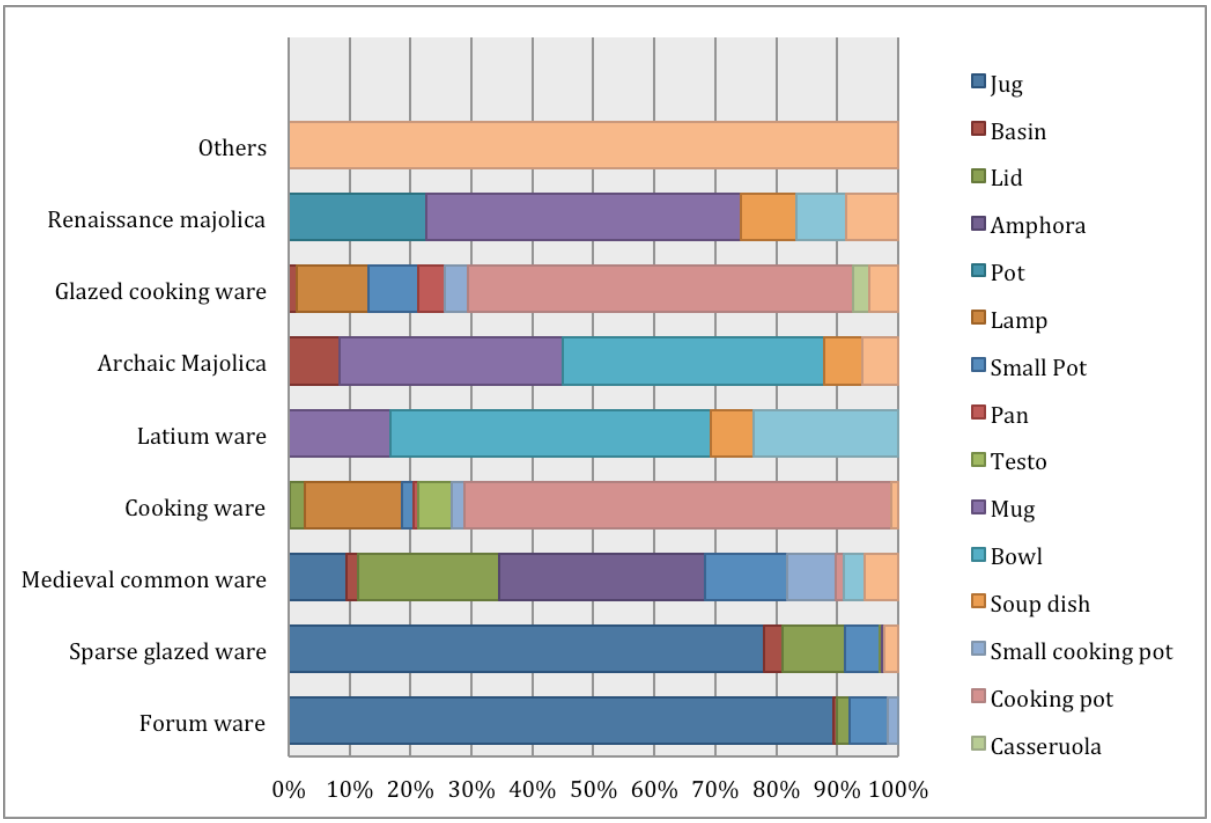

Figure 57: Graph to show relative percentages of forms for each pottery class, based on the EVE.

Figure 57 shows the variety of forms for each class, considering the EVE of the three assemblages, and based on the forms recognised and measured. It is evident that both the Forum Ware and the Sparse Glazed Ware can be defined as "mono-form" classes, since most of the sherds analysed were originally part of jugs. This is particularly clear for the Forum Ware, with almost 90% of the recognisable pots identifiable as jugs. This scarce variety of forms that characterised Forum Ware and Sparse Glazed Ware is even more evident when compared with late medieval

productions, such as Latium Ware and Archaic Majolica, which are not characterised by the prevalence of mainly one form among the others. The coarse wares are clearly the classes that changed more over the centuries, as they include the largest quantity of different forms, such as the pan and the so-called *orciolo*. Nevertheless, if we consider the chronologies of the classes, the long chronologies typical of the coarse wares are also significant. For example, medieval Common Ware lasted at least from the seventh century to the nineteenth. Thus, the previous analysis must be refined, as it is crucial to be able to distinguish when the variety of forms actually increased. So, in Figure 58 only the forms of the fine wares are considered, dividing them into the period of production. In this way, it becomes evident that, from the start of the thirteenth century, the forms produced increased, and this happened alongside the introduction of tin-glazed productions.

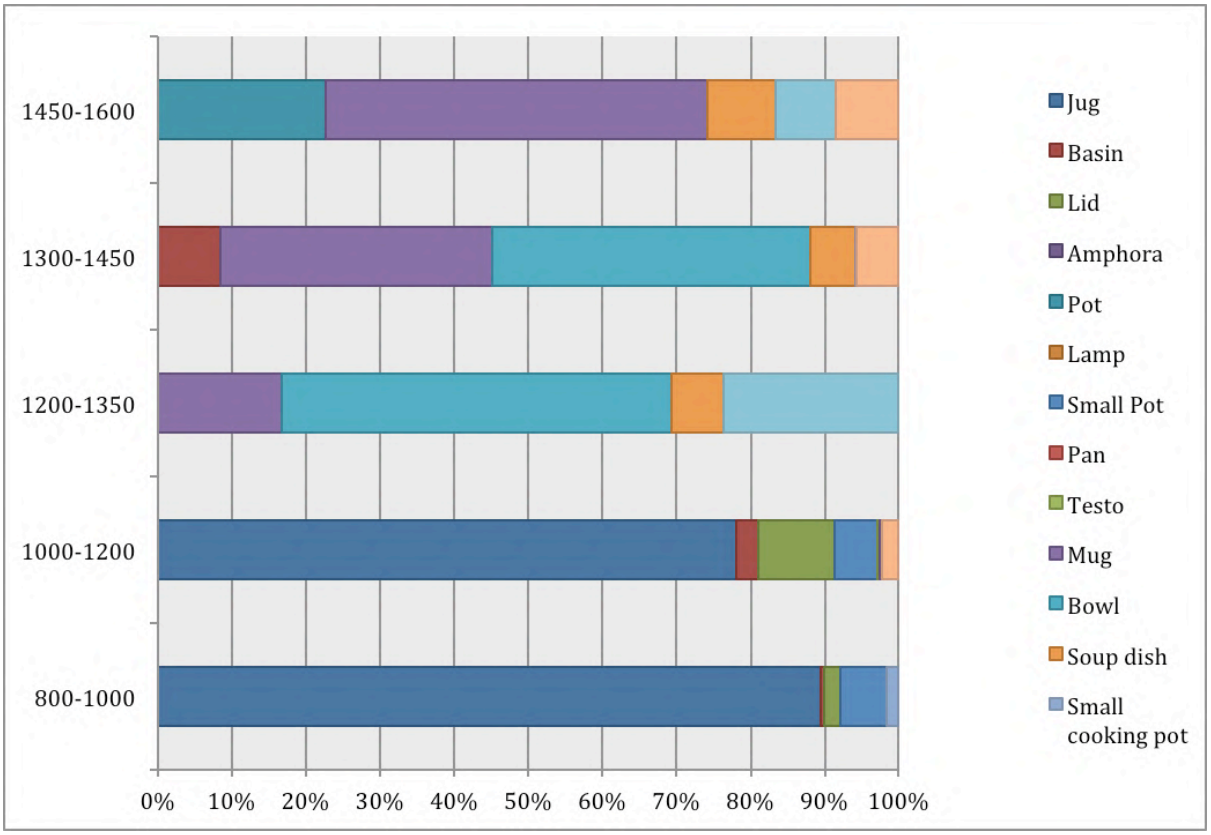

Figure 58: Graph to show the forms of fine wares for different periods of production, based on the EVE. Key for chronologies: 800-1000, Forum Ware; 1000-1200, Sparse Glazed Ware; 1200-1350, Latium Ware and Green Glazed Ware; 1300-1450, Archaic Majolica; 1450-1600, Renaissance Majolica.

In fact, Forum Ware and Sparse Glazed Ware consist of 80-90%, but after the introduction of Latium Ware in the thirteenth century none of the forms exceeds 50%. Moreover, the most numerous form produced from the thirteenth century onwards is the bowl, which seems totally absent in the previous assemblages. As will be discussed in the Chapter 8, the introduction of new forms, such as the bowl, is crucial, as it indicates changes related to diet, especially if the new form introduced forms up to 50% of the whole assemblage.

Finally, we must also consider the coarse wares, since these were the classes that changed most through the centuries. As mentioned in Section 2.4, one of the main features about coarse wares is their functionality, which often affects the scope for dating some forms because of their long use. At the same time, by definition the coarse wares are characterised by wider circulation, and thus their changes define more in detail all the corresponding changes related to **food habits**. As a consequence, it is vital to analyse those changes as well, and in order to do that, the EVE of each form has been considered, but the classes have been divided depending on the assemblage, as each of them has been dated to a different period. From this we see those forms typical of each chronological frame analysed (Fig. 59); the data range of the graph is related to the general chronology of each site, depending on the general chronologies of fine wares: *Vicus ad Carinas* (900-1000), Colosseum (1100-1200), S. Omobono (1200-1300).[389]

[389] Clearly, the range has been simplified in order to fit all the data in the graph.

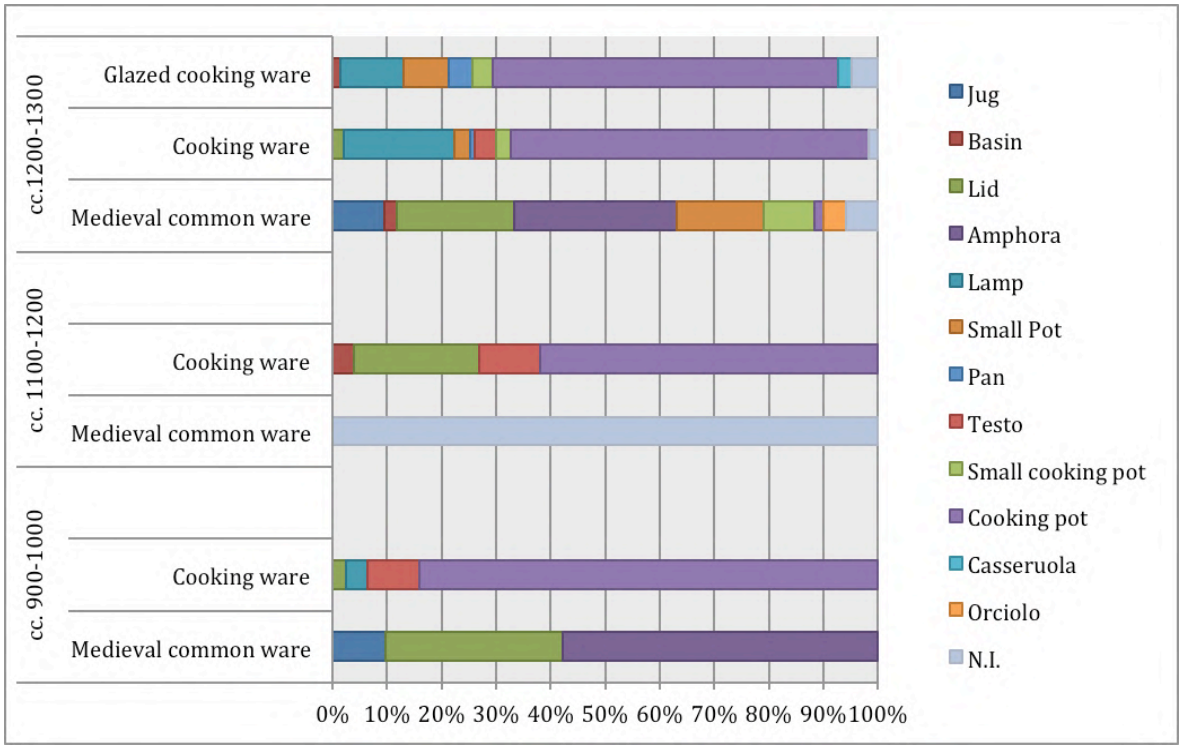

Figure 59: Coarse ware forms divided into period of production, based on the EVE.

If we consider the types, some were used both in the tenth and in the late eleventh century, although the chronological definition of an assemblage results mainly from the fine wares, whose chronology is more focussed. As a consequence, the presence of same types during different centuries is not surprising.

According to this kind of division, the main forms made in coarse resemble the fine wares. In fact, the forms used in the tenth and eleventh centuries are few: as regards the Cooking Ware, there are mainly cooking pots (almost 85% here), and some lids and *testi* (bread cooker), while other forms such as the lamps are scarce. As for the medieval Common Ware, we recognise mostly amphorae (almost 50%), lids, and fewer jugs. A significant change is visible from the end of the twelfth century, when the variety of forms used for cooking increase, hitting a peak from the thirteenth century onwards. At the same time, from the fourteenth century onwards Glazed Cooking Wares start to replace the unglazed wares, and the variety of forms grows even further. By contrast, it is more complicated to follow similar changes for the

Common Wares, when we consider the eleventh to twelfth centuries, because of the lack of measurable parts from the assemblage dated to that period (Colosseum). Despite that, the last period analysed here (thirteenth and fourteenth centuries) had more diagnostic parts, as it is possible to see from the variety of forms that have been recognised. In fact, the amphorae are no longer the main form produced, since there are as well lids, jugs, pots of different sizes, and new forms such as the *casseruola* and the *orciolo*. Thus, Common Wares are also characterised by a progressive growth of forms produced, and the end of the twelfth century these appears as the cornerstone of various innovations that involved the ceramics productions and trades.[390]

7.3.3 – Brokenness

Regarding brokenness, our information is only preliminary and cannot yet be related to different ways of re-using sherds over the centuries. Currently the analysis of the brokenness from several sites can only be used in order to analyse the formation of the archaeological layers. Moreover, if we could record the level of brokenness from as many assemblages as possible, it would permit the creation of a database based on brokenness of ceramics. This would allow us to recognise the kind of archaeological deposit from the state of conservation of the ceramics.

For example, each case study assemblage is characterised by different values of brokenness. The less fragmented context is related to the actual life in *Cuneo* X, where the maximum value for brokenness is 108; by contrast, the huge fills of the rest of *Cuneo* X and the ceramics from *Vicus ad Carinas* are extremely fragmented, with brokenness at ≥500. Such results are consistent with that expected from those kinds of archaeological layers. And yet the level of brokenness of the ceramics

[390] For general features of ceramics, see Chapter 2. For the meaning of such differences in a broader perspective, see Chapter 8.

excavated in the church of S. Omobono is lower than could be expected, with the highest value 113 which totally challenges the reliability of brokenness itself. However, since S. Omobono is our sole case study that was excavated more than thirty years ago, using different methods and with a likely selection of the ceramics in the first place, such a low result is unsurprising. Moreover, the brokenness of this particular assemblage should be compared to that of sherds from an intentional pit, more than brokenness of fills. In fact, I view the assemblage of S. Omobono as a *unicum*, as vessel completeness is extraordinarily good, which demonstrates preservation generally related to intentional burial in pits. Despite this, creating a database containing several examples of brokenness will add useful information to the study of archaeological sites, as it would permit future determination of archaeological deposit type based upon the level of ceramic preservation. My own study is thus a useful first step in this.

7.3.4 – Discussion

In summary, the comparative and diachronic analysis of the assemblages on which this thesis is focused has demonstrated the importance of such kinds of quantitative analysis. The comparison between residual and in-phase ceramics of each assemblage has revealed how much work must still be done in order to render data from residual ceramics usable. Residual ceramics can indeed give information regarding all kinds of past activities that did not leave many in phase ceramics, such as cuts and removals. The comparison between the coarse wares and fine wares produced during specific periods is crucial in order to analyse the changes involved in both the production and consumption of certain kinds of ceramics. Moreover, such changes appear closely related to demand for certain supplies and consequently infer the level of population. Similar conclusions can be made regarding the changes of forms produced, either if they decreased or increased. Such transformations are presumably related to food habits and the introduction of new

forms in certain periods, or a re-introduction of forms, suggesting important signs of economic change.

It is clear that in order to work on ceramics in a diachronic way, there is the need of comparative analysis that requires reliable and unique methods of quantification. Indeed, quantification is the first step in making the ceramic data a usable source of information. As explained above, no method is reliable all the time, and often it depend on the features of the assemblage studied. Most likely the best process uses at least two different methods in order to reduce bias as much as possible. Finally, we have seen that using EVE lets us compare different assemblages without risking either overestimating or underestimating some data. In fact, the analysis of the forms would not have been possible considering the number of sherds, as such value is too general and does not consider that some wall-sherds are not recognisable. Instead, EVE has permitted a focus on **typologies** and **forms** that were produced in each period, which is significant when considering coarse wares and the issues related to their identification. At the same time, EVE omits all classes for which it was not possible to find any measurable part, and it shows better results when applied to homogeneous assemblages. Evidently, using different methods is better, despite being time-consuming, in allowing us to make ceramics "talk" as much as possible.

Chapter 8
From Sherds to History: The Socio-Economic Spaces of Medieval Rome

8.1 - Introduction

The economic trends characterising Rome between the tenth and fourteenth century are mostly ones of growth, as seen from its size, population and artisanal productions, despite the political crisis explained in Section 1.3; by contrast, the fourteenth century marks the beginning of a crisis. But what do the ceramics say for these periods and is it possible to recognise the same trends from changes in ceramics? Here I will analyse the results of the quantitative analysis in light of the socio-economic background: as seen, such diachronic work is new for studies on medieval Rome. I argue that it is necessary to widely use the archaeological data, as until now most of the archaeological works were site-focused, instead of having more broader views, which resulted in a patchy reconstruction of the medieval city. As a consequence, the aim of this final chapter is both to explain how we can expand the archaeological and historical data, and, in particular, to demonstrate the importance of ceramics for the wider analysis of Rome. Thus, we will begin a dialogue between historical and archaeological sources concluded by the specific comparison with data analysed. Note that the Early Middle Ages, prior to AD 900, will not be considered in this analysis, since the specific archaeological sites that have been studied for this thesis do not cover that period; nevertheless, they are part of the bibliography.

8.2 – Changes in the Ceramics

Firstly, quantitative analysis has shown that in our assemblages the quantity of residual ceramics significantly decreases from the tenth to fourteenth century and

this is related to two main issues that can enrich our understanding of major economic transformations: the availability of in-phase ceramics and the ways in which the archaeological deposits have been created. In fact, while in-phase ceramics inform us of production quantity, residual classes talk about reuse and its scale. As for in-phase ceramics, they indicate how much of a certain class was produced; tenth-century production being less than fourteenth-century, despite such archaeological data seeming to be in contrast with the fourteenth-century crisis. Vice versa, we have seen that the two centuries just before the crisis were a period of development, both for population and economy, and that during those centuries these reached a wealth never seen before, although ceramics do not show this major economic dynamism. If we consider the formation of sites, the presence of more residual ceramics is clearly related to significant new works within the city, for which major quantities of ceramics were needed.

Our data show a progressive reduction in residual ceramics from the tenth to the fourteenth century, indicating either fewer urban transformations, or major availability of "recent" ceramics to be reused as building materials; meaning, again, that those "recent" classes were large-scale productions, but not necessarily ones corresponding to positive economic trends. For example, in the case of Colosseum, the high percentages of residual ceramics for the period between the tenth and late twelfth century do correspond to periods of major transformations of Rome, which then turned into massive urbanisation. By contrast, the huge fill of the church of S. Omobono, with ceramics typical of the second half of the fourteenth century, demonstrates the greater availability of such classes then, and at the same time shows that there was no necessity for extra building-residual ceramics, because it was most likely not a period of vast urban transformations; or at least not as vast as before. We must consider that such a decrease in urban transformation would have

been progressive, since at least until 1349 Rome was economically strong.[391] So, it is crucial not to overestimate such information, especially as these results refer to our case studies.

As for the ratio between coarse and fine wares, from the tenth century to the fourteenth, the quantity of coarse wares rapidly increased. This may be related to a corresponding increase of population, which probably reached 50,000 inhabitants by the start of the fourteenth century. In particular, it is noticeable that the assemblage from Colosseum is characterised by the balance between coarse and fine wares. Depending on the technical changes that affected ceramics during that period, this balanced ratio is significant. In fact, ceramics dated to the second half of the twelfth century especially are characterised by high levels of standardisation, thus confirming the existence of mass-urban demand. Moreover, the absence of a clear difference between coarse wares and fine wares suggests a more generalised wealth, without many sharp differences. This makes sense within the general knowledge of this period, as we are at the peak of the economic dynamism of Rome, thus just before the rise of the barons and the contemporary transformation of the economy.[392]

This period seems especially characterised by less innovation, something to be confirmed when analysing fine wares. Such standardisation is also demonstrated by the main forms produced between the tenth and the end of the twelfth century. On the one hand, Forum Ware and Sparse Glazed Ware have been defined "mono-form" classes, since, from the late tenth century to the end of this production, dated to the end of the twelfth century, the main form produced is the jug.[393] The coarse wares produced during this period, such as cooking pots and amphorae, are clearly the main forms circulating, without major changes being observed until the end of the twelfth century. Thus, I believe it is evident that the increasing level of wealth

[391] See Lori Sanfilippo, *La Roma dei Romani*.
[392] See Section 1.3.
[393] See Section 2.3.

characterising Rome between the tenth and twelfth century does **not** correspond to major transformations related to daily habits. In fact, Rome maintained its traditions, without external influences.

By contrast, from the end of the twelfth century we can see several significant changes, such as the introduction of new fine wares, with new technologies, and a progressive increase in forms (Fig. 57), used both for cooking and as table wares. As analysed, the early thirteenth century corresponds to the progressive rise of the barons, who peak during the same century. If we consider the changes that affected the ceramics during that period, the thirteenth century is when the 'phenomenon' of imported ceramics from Southern Italy reached its peak too. This correspondence might be related to the increased demand for 'exotic' vessels; however, while it is not likely that all such imported vessels were owned by members of those high level élites, it may be that such élites were the first to introduce new food habits and fashions, which were then imitated by others. In fact, despite both Latium Ware and Green Glazed Ware being characterised by the presence of some open vessels, such as bowls, those were not as mass produced as during the fourteenth century, when there was no such need (and demand) for imported vessels. Therefore, probably from the late twelfth century both the presence of a new high level class and good economic conjuncture contributed to different ceramic demands, as Roman productions were no longer the best available on the market. In addition, we must recognise that from the twelfth century other Italian cities also experienced rapid increase in imports. However, the ceramics market was not entirely dominated by the Roman glazed productions, as there were some alternatives.

Before coming back to this issue, it is crucial to analyse the last main development of the ceramics in the fourteenth century. For both the forms and the classes, the fourteenth century represents a watershed, as the variety of forms significantly increased (Figs. 57, 58 and 59), and a new fine ware, Archaic Majolica, starts to spread. However, it is still difficult to interpret such great changes. On the one hand,

they seem in contrast with the fourteenth century crisis, but if we consider the origins of Archaic Majolica and the meaning of such changes, the evidence of crisis is even clearer. In fact, Archaic Majolica, whose origin is much debated since the late 1960s, likely relates to Tuscan and Umbrian areas, as can be deduced from both technique and decorations. On the other hand, the presence of those 'foreigners' might indicate that Rome was attractive/rich enough as a place to work that potters came here and left their techniques with the Romans. The Roman ceramic tradition was affected by changes that had never happened before, such as the possible presence of potters originating from outside Rome itself. This is something totally new, since the ceramic tradition of Rome had been quite rigid until then, where it never changed the repertoire of forms, even in the case of innovations such as the tin coating of Latium Ware, which is likely to have South Italian influence. Moreover, Latium Ware itself was not produced after the thirteenth century: by that time Roman productions had totally lost their strength, and other Italian cities had totally independent productions. Similar patterns have been studied, for example, for Roman textile production, which, during the late Middle Ages never reached the quality of the Tuscan production; this has been used as evidence of regression for the Roman economy of the Late Middle Ages.[394]

8.3 - Trades and Economic Growth

In terms of trade in Roman medieval ceramics, the only one that has been found outside Rome and its hinterland among the classes presented in this thesis is Forum Ware, thus confirming Rome's importance in the ninth and tenth centuries. In fact, the presence of ceramics comparable to Rome's Forum Ware as regard forms, decoration, and glaze, but locally produced is still a matter of debate, becauses what we know so far about this class does not permit us to clearly identify the origin of this technique. In fact, we have seen that the very first production of Forum Ware is

[394] See Lori Sanfilippo, *La Roma dei Romani*, pp. 149-164.

characterised by the presence of some forms with Byzantine origins, such as the chafing dish. At the same time, there is no certain archaeological evidence for a Byzantine prototype and at the moment this hypothesis cannot be confirmed. Tenth-century Forum Ware was likely produced in Rome itself, but occurs elsewhere. However, its limited quantities do not indicate a massive trade of this class and some scholars see it as a minor trade related to medium-to high-level demand. In addition, the modest quantity of Forum Ware production, at least if compared to greater productions typical of the late Middle Ages, points to the same conclusions. By contrast, as seen from the assemblage from the *Vicus ad Carinas*, the presence of Forum Ware was not something exceptional between the second half of the tenth and the first half of the eleventh century, given that it was common enough to be used as building material for restoring a medieval road.

Moreover, looking at the quantity of ceramics, it is undeniable that medieval productions were not as large as ancient productions. In particular, those between the eighth and eleventh century were not as sizeable as productions from the twelfth century onwards, and the assumption that, because of that, Forum Ware was consequently a prerogative of middle and high élites is too simplistic.

But how else do we explain the (so far limited) presence of Roman Forum Ware outside Rome? Despite such issues surely requiring more future research, the hypothesis of a sort of "topographic" identification of some specific ceramic products is appealing: the presence of Forum Ware should not be intended as a statement of high status, but its importance outside Rome could have related to the fact that it was from Rome, and contemporaries could easily recognize it. Moreover, tenth-century Forum Ware being among the few classes circulating outside the city, this fits the idea of the growing economy of tenth-century Rome – whose importance is still under-estimated. In fact, it must be considered that Rome was still the biggest city of Latin Europe, and most likely had an economy more dynamic than many

other Italian cities.[395] Thus, it makes sense that the Roman provenance of this particular class was its main feature, which might have indicated the origins of the people who owned it. As this is just a preliminary hypothesis, it is essential to carry out further research that focuses on the whole assemblages outside Rome in which such Forum Ware has been found, in order to analyse percentages, ratio between classes, and if such Forum Ware is the only class of the assemblages with Roman origins. Furthermore, such analysis could be enhanced by the analyses of written sources, looking for possible Roman origins for some people of the areas interested by the presence of Forum Ware – despite the limits of the written sources for the tenth century.

8.4 - People and Food Habits

Finally, what of possible changes in people's food habits? A comparison between ceramics and data from animal bones has demonstrated that the late medieval diet was indeed more varied.[396] However, it is complicated to associate such changes with major economic trends, especially because data for animal bones from excavations dated to the tenth and eleventh century are scarce, thus compromising our possibilities of analysing actual changes. In addition, a more varied diet is not necessarily related to wealthy status. For example, the presence of more sheep bones in thirteenth- and fourteenth- century contexts has recently been related to the failed attempt to start a large-scale Roman textile production in that period.[397] In contrast, from the scarce information available for the eleventh century, there was a presence of seafood away from coasts, which is not common for the Middle Ages, thus

[395] See C. Wickham, *Sleepwalking into a New World. The Emergence of Italian City Communes in the Twelfth Century*, (Princeton, 2015), pp. 119-160.
[396] Luca Brancazi, personal communication.
[397] See H. Di Giuseppe, 'La produzione laniera a Roma tra Tardo antico e Medioevo: un caso di industria disattesa?', in *L'archeologia della produzione a Roma (secoli V-XV)*, pp. 243-252.

indicating a better diet and more wealthy status.[398]

Nevertheless, despite the paucity of data about food habits and changes between the tenth and fourteenth century, the introduction of a richer variety of food surely affected ceramic production, since, for new ways of preparing food, more forms were needed. For example, while the shape of cooking pots is clearly related to boiling food, the re-introduction of pans and saucepans is probably related to fried foods. Unfortunately, the available data for the animal bones are limited, thus it is still difficult to relate them to wider economic issues and it is only possible to make general assumptions. Despite this, the data do not seem to contradict what we have analysed about the ceramics and instead point to the same conclusions. Moreover, as Joanita Vroom has demonstrated for Aegean society from the seventh to twentieth century, ceramic forms and their changes are often related to different dining habits.[399] As in our analysis, the main difference from ancient to medieval period regards the passage from more communal to individual meals. This change is clearly visible from the absence of large communal dishes from the sixth century onwards, as they were replaced by smaller individual forms, such as cooking pots; moreover, before the start of the thirteenth century our medieval ceramics set lacks dishes and bowls, which are progressively reintroduced from the thirteenth century onwards. As mentioned, it is likely that these closed forms were produced using perishable materials, such as wood and/or metal. However, here it is worth stressing that the good economic conjuncture of the late twelfth and thirteenth centuries, as well as the increase of population (and demand), caused the wide diffusion of open ceramic forms, which are the typical late medieval forms.

[398] I thank Luca Brancazi for this information.
[399] See J. Vroom, *After Antiquity. Ceramics and society*, pp. 303-368.

8.5 - Ceramics and Rome's Medieval Economy

In conclusion, analysis of the changes witnessed in medieval ceramics in Rome between the tenth and fourteenth century identifies some key trends. First of all, the renewal of Rome's economy certainly started during the tenth century, when this city was 'unique', in terms of population and production, as it was apparently the only city producing its own specific fine ware - Forum Ware. In addition, this was the only Roman medieval production that had a wider diffusion and the first glazed production since the more complex productions of the imperial era. Then, the rapid economic rise that characterised the tenth and eleventh centuries had a progressive slowdown.

The twelfth century represents a moment of greater standardisation and larger-scale production, whereas the Roman ceramics progressively lose their importance, partly because other Italian cities started their own productions, but also due to social changes happening in Rome. In fact, from the middle to late twelfth century we see the rise of barons, whose presence marks a progressive transformation of Rome's economy. An example of that is the unsuccessful attempt of starting a Roman textile production, as Rome never reached the quality and the success of other cities. As for the ceramics, both Latium Ware and Green Glazed Ware can be interpreted in a similar way, since neither were produced after the end of the thirteenth century, when Archaic Majolica, with origins in the Tuscan-Umbrian area, becomes the main fine ware locally made circulating in Rome. Similarly, the introduction of new forms, visible from the end of the twelfth century, was a consequence of changing food habits and can also be interpreted as a cultural change. This confirms that Rome was not as influential as it was from the tenth to the late twelfth century, given that now it was influenced by other cultural traditions, as strong as the Roman one. As seen above, the increase in both population, and (consequently) amount of ceramics is not necessarily a sign of wealth. By contrast, it was thanks to the growth spurt that

Rome's economy saw especially during the eleventh and the first half of the twelfth century that the city was able to maintain a certain prosperity, but that level of economic dynamism was never regained. Further, we must bear in mind that Rome was unique for the early date of its economic increase. The main issue concerns the availability of sources, both written and archaeological, hence the importance of diachronic and comparative works, such as offered by this thesis. Regarding the written sources, we have seen that Roman medieval sources are not as scarce as has previously been suggested in past historiography. Furthermore, the archaeological excavations within the city datable to between the tenth and fourteenth century are undoubtedly few, but they continue to increase. At the same time, we must consider that there are hundreds of archaeological reports, and even if many of them are so old that their data should be reanalysed, their importance is clear, providing additional information, as shown here, as for example, regarding past excavations in Colosseum. In fact, medieval Rome is still obscure, but often this is primarily a consequence of not integrating archaeological data. It is full of very detailed analyses of types and forms, but when a broader overview is needed, we lack wider works and analyses. As such, reanalysing such reports is crucial to our understanding of all archaeological sites containing medieval ceramics.

In summary, the data from ceramics are to be considered important for generating a broader and fuller analysis of Roman medieval society, as it is through the analysis of several features, such as different percentages of residual ceramics, or changes of forms, that we can add to the wider economic history of the city. This thesis has set out to offer a first step towards integrating archaeological and historical sources, contextualising ceramic finds to permit a fuller understanding of a complex and fascinating unwritten history, viewing ceramics as valuable vestiges able to educate us more of Rome's medieval past.

Appendix 1: Layers of Each Site

Site	Year excavation	Area	Layers
Vicus ad Carinas	**2016**		5005 pulizia; 5013; 5016; 5019; 5020; 5025; 5026; 5029; 5030; 5031; 5032; 5033; 5036 t. XXXII; 5038; 5039; 5041; 5044; 5045; 5046; 5048; 5050; 5052; 5053; 5058; 5061; 5062; 5068
	2017		5040; 5059; 5088; 5089; 5090; 5090 fossa; 5107; 5113; 5125; 5126; 5127; 5128; 5129=5134; 5131; 5132; 5133; 5134=5129; 5137; 5139; 5140; 5144; 5145; 5146; 5146 bis; 5147; 5148; 5149; 5151; 5152; 5154; 5155; 5158; 5160; 5163; 5164; 5166; 5167; 5168; 5169; 5172; 5173; 5174; 5175; 5177; 5178; 5179; 5180; 5181; 5182; 5183; 5184; 5185; 5188; 5189; 5190; 5190 chiazza nera est; 5191; 5193; 5194; 5195; 5196; 5200; 5203; 5206; 5208
Colosseum	**2014**	**Cuneo IX**	506=571=569=558; 507; 530; 531; 533; 540; 541; 545; 547=537; 550; 557; 560; 563; 564; 565; 569; 583; 584; 585; 587; 588; 622; 623; 624; 625; 626; 627
	2012	**Cuneo X**	303; 307; 323; 324; 328; 330; 332; 333=347; 334; 335; 337; 338; 340; 342; 343

S. Omobono	**1980s'**	**1**	1; 2; 3; 5; 7; 14-16; 15; 18; 20; 22-24; 25; 27; 35; 40; 41; 42; 52
		2	1; 2; 4; 15; 16; 18; 20; 21-22; 24; 25-26; 27; 32; 33; 34; 36; 40; 50; 53; 64; sotto il pavimento
		3	4; 5; 8; 9; 13; 14; 17; 19; 21; 24; 25; 26; 29; 31; 32; 34; 35; 45; 49; 50; 52; 60; pulizia
		4	1; 4; 8; 10; 16; 18; 20; 23; 27; 29-30; 37; 39; 40; 43; 44; 50; 51; 53; 56; 62; 66; 67; 68
		5	1; 19; 22; 24; 30; 35; 37; 38; 39; 40; 41; 47; 50; 51; 55; 58; 59; 61; 66; 72
		6	5; 7; 11; 13; 15; 17; 18; 19; 22; 23; 25; 28; 36; 38; 39; 45
		7	2; 5; 7; 10; 13; 14; 15; 17; 19; 20-22; 24; 28-29; 34; 35; 37; 38; 39; 42; 44; 45; 46; 47; 48; 49; 50; 51; 55; 61
		8	2; 8; 11; 25; 32; 34
		9	1; 2; 5; 6; 10; 13; 14; 15; 20; 21; 22; 24; 25; 26; 28; 29; 31; 32; and 43
		10	20
		Post 1985	8; 9; 12; 17; 18; 26; 30; 31; 35; 36; 39; 41; 45; 52; 57; 58; 59; 60; 65; 73; 92; 94; 97; 100 (71Q5); 101; 125; 131; 136; 141; 145

Appendix 2: Example of Data Recording

For the assemblages of the *Vicus ad Carinas* and the Colosseum, each layer has been documented on Word as follow (example - layer 530 from Cuneo IX); keys: **R=**Rim, **H=**Handle, **S=**Spout, **B=**Bottom, **Bs=**Body sherd.

Class	Form	Type	R	H	S	B	Bs	Tot.	Weight (g)	Ø (cm.)	*EVE*
Amphorae			2	2		3	45	45	3,976		
Tot.	52								3,976		
African Sigillata							1	1	3		
Tot.	1								3		
African Cooking Ware			1				1	2	62		
Tot.	2								62		
Common Ware			1	6		3	35	45	342		
Tot.	45								342		
Cooking Ware	Cooking pot	Cb5 40	1						274	11	0.1
			2	8		1	24	35			
	Lamp				1			1			
Tot.	37								274		
Painted Ware			1					1	2		
Tot.	1								2		

Forum Ware	Jug	Cb5 330		1				1	65		
			1				7	8			
Tot.	9								65		
Sparse Glazed Ware	Jug	Cb5 335	2					2	91	8	0.1
		Cb5 330	1		1		8	10			
Tot.	12								91		
Latium Ware							4	4	38		
Tot.	4								38		
Not id.							1	1	3		
Tot.	1								3		
Total	164										

In the case of the church of S. Omobono, the layers were already documented in charts, which I have double-checked on site, and then copied in the same format as others during Summer 2016.

Finally, I have put the data in Excel where I made all the calculations for creating the graphs explained in Chapter 7.

Appendix 3: Types

For the assemblages of the *Vicus ad Carinas* and the Colosseum I have recognised the types of the in-phase classes. As for the church of S. Omobono, the original documentation includes ceramics types, and there was no need of recognising them again.

Key: **Cb3**=Crypta Balbi 3; **Cb5**=Crypta Balbi 5; **R**=Ricci; **SC**= Santa Cornelia.[400] The number in brackets indicates how many sherd of that type were found. For example, if in layer 5003 there is Cb5 313 (1) and Cb5 327, it means that there was one diagnostic part that is comparable to type n.313 published in Crypta Balbi 5, and one comparable to type n.327 published in the same volume.

Site	Area	Layer	Class	Type
Vicus ad Carinas		**5003**	Sparse Glazed	Cb5 313 (1); Cb5 327 (1)
		5006		Cb5 309 (1)
		5007		Cb5 364-365 (1)
		5013	Common Ware	SC 9 (1); SC 92 (1)
		5016	Cooking Ware	Cb5 82 (1)
		5022		Cb5 39 (1)
		5029		Cb5 6 (1)
		5031	Sparse Glazed	Cb5 327 (1)

[400] Cb3: Manacorda, *Archeologia urbana a Roma: il progetto della Crypta Balbi. 3*; Cb5: Saguì-Paroli, *Archeologia Urbana a Roma: il progetto della Crypta Balbi. 5*; R: Ricci, 'I reperti archeologici del sottoscala XXXVI'; SC: Whitehouse, 'The medieval pottery from S. Cornelia'.

		5034		Cb5 365 (1)
		5038		Cb5 315-316 (1)
		5052	Cooking Ware	Cb5 36 (1)
			Sparse Glazed	Cb5 336 (1)
		5062	Cooking Ware	Cb5 71 (1)
		5063	Forum Ware	Cb3 157 (2)
		5086	Cooking Ware	Cb5 40 (1)
		5094		Cb5 36 (1)
		5104	Sparse Glazed	SC 128 (1); Cb5 366 (1); Cb5 364 (1)
		5113	Common Ware	SC 92 (1)
			Cooking Ware	Cb5 109 (1)
		5115		SC 29 (1)
		5117		Cb5 36 (1)
		5125	Common Ware	SC 92 (1)
			Cooking Ware	SC 33 (1)
		5127	Forum Ware	Cb3 159 (1)
		5147	Cooking Ware	Cb5 32-35 (1)
		5172		Cb5 36 (1)
		6003		Cb5 16 (1); Cb3 251 (1)
		6005	Common Ware	SC 91 (1); SC 94 (1)
Colosseum	**Cuneo IX**	**530**	Cooking Ware	Cb5 40 (1)
			Forum Ware	Cb5 330 (2)
			Sparse Glazed	Cb5 335 (2)

		537=547	Common Ware	Cb5 204 (1); Cb5 170 (1)
			Cooking Ware	Cb5 43 (1); Cb5 106-108 (1)
		545	Common Ware	Cb5 170 (2); Cb5 181 (2)
			Cooking Ware	Cb5 20 (1)
		557	Cooking Ware	Cb5 20 (1)
		563	Sparse Glazed	Cb5 334-335 (1)
		564	Common Ware	Cb5 193 (1)
		583	Sparse Glazed	Cb5 335 (2); Cb5 337-340 (1)
		584	Common Ware	Cb5 193 (2); Cb5 199 (1); Cb3 148-Cb5 117 (1)
		585	Common Ware	Cb5 95 (1)
		588	Cooking Ware	Cb5 193 (1)
		622	Cooking Ware	Cb5 39 (1)
		626	Common Ware	Cb5 285-288 (1)
	Cuneo X	**303=322**	Forum Ware	R 99 (3); R 102 (2); Cb5 319 (1)
			Sparse Glazed	Cb5 306 (1); Cb5 314 (2); Cb5 320 (2); Cb5 329 (4); Cb5 332 (8); Cb5 333 (1);

			Cb5 335 (17); Cb5 345 (1); R 103 (1); R 109 (14); Cb5 356; R 90 (3); R 91 (1); R 96 (1)
		Common Ware	R 221 (3); R 223 (1); R 225 (1); R 248 (7); R 250 (6); R 251 (1); R 265 (1)
		Cooking Ware	R 59 (1); R 77 (1); R 79 (1); R 19(3); R 22 (20); R 23 (1); R 27 (1); R 29 (3); R 31 (1); R 32 (6); R 34 (3); R 107 (1); R 1 (2); R 6 (4); R 8 (3); R 9 (2); R 14 (1)
	307	Sparse Glazed	Cb5 329 (1); R 103 (2); R 105 (1)
		Cooking Ware	R 22 (1)
	324	Common Ware	R 266(1)
		Cooking Ware	Cb5 89 (1)
	328	Forum Ware	R 99 (5); R 89

		(1); R 94 (1); R 101 (1); R 102 (2); R 105 (1); R 108 (2); Cb5 314 (1)
	Sparse Glazed	R 90 (1); R 91 (6); R 104 (1); R 106 (20); R 110 (19); Cb5 321 (1); Cb5 330 (2); Cb5 334 (1); Cb5 335 (5); Cb5 336 (2); R 92 (1)
	Common Ware	R 221 (2); R 223 (1); R 225 (2); R 112 (1); R 115 (1); R 118 (1); R 248 (2)
	Cooking Ware	R 63 (1); R 79 (1); R 86 (1); R 50 (4); R 19 (4); R 20 (4); R 21 (6); R 22 (6); R 23 (5); R 24 (2); R 25 (1); R 26 (10); R 27 (10); R 28 (3); R 29

			(16); R 31 (4); R 32 (1); R 33 (4); R 34 (2); R 36 (1); R 37 (2); R 39 (2); R 40 (2); R 43 (1); R 44 (1); R 46 (1); R 1 (2); R 2 (2); R 3 (3); R 4 (2); R 6-7 (5); R7 (1); R8 (1)
	332	Sparse Glazed	Cb5 332 (1)
		Cooking Ware	R 26 (1)
	333=347	Forum Ware	R 99 (3)
		Sparse Glazed	R 105 (1); R 106 (2); R 110 (1)
		Cooking Ware	R 19 (2); R 27 (1); Cb5 38 (1); Cb3 62 (1); Cb5 107 (1)
	340	Sparse Glazed	R 110 (1)
	343	Forum Ware	Cb5 337 (1)

List of Abbreviations

ASR: Archivio di Stato di Roma

BCom: Bullettino della Commissione Archeologica Comunale di Roma

CIL: Corpus Inscriptionum Latinarum

CRAI: Comptes rendus des séances de l'Académie des inscriptions et belles-lettres (Paris)

JRA: Journal of Roman Archaeology

LTUR: Lexicon Topographicum Urbis Romae

MEFRA: Mélanges de l'École française de Rome - Antiquité

MEFRM: Mélanges de l'École française de Rome - Moyen Âge

MemPontAcc: Memorie. Atti della Pontificia Accademia romana di Archeologia

NatHist: Naturalis Historia

PBSR: Papers of the British School at Rome

RedPontAcc: Rendiconti della Pontificia Accademia Romana di Archeologia

RGesDAug: Res Gestae Divi Augusti

RM: Reti Medievali

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